

MAORI FORTIFICATIONS OF THE TATARAIMAKA DISTRICT, TARANAKI

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Abstract. Thirty-two Maori fortifications are described from the Tataraimaka district, Taranaki, North Island, New Zealand. The majority of sites have ring-ditch defences. Much of the survey area may be characterised as having an unusually high concentration of pa, many of which are of closely similar form.

This paper continues the description of pre-European Maori fortifications of the region between New Plymouth and Stoney River, in Taranaki, North Island, New Zealand. A background to the programme and the reasons for undertaking the research have already been published along with the results of the first years' field work in the Omata and Oakura districts (Prickett 1980). The programme will conclude at Stoney River with one more summer's work. The present work covers a somewhat wider area than the historical Tataraimaka Block, which lay between the Timaru and Katikara Rivers. To the north-east I have included pa on the right bank of Timaru River, and Patuha (N108/157) and N108/180 in the Kaitake Range. To the south-west the survey area extends to the right bank of Katikara River.

A general description of the programme area has already been given (Prickett 1980). Topographically, the Tataraimaka district consists of extensive terraces deeply cut by the broad valleys of the Katikara and Timaru Rivers, and sharply incised by other, smaller streams. On the coast is a wide inter-tidal platform of rocky reefs which is sometimes backed by a sandy beach. A low sea cliff rises directly to terrace country which allows easy access to the foot of the precipitous Kaitake Range more than 4 km inland. The Timaru and Katikara Rivers do not rise in the Kaitake Range but skirt its southern margin and rise ultimately in the higher Pouakai Range inland. Maori fortifications in the Tataraimaka district are, except Patuha and N108/180, located on the narrow coastal plain, and are never more than 4.5 km from the sea. The district, like the entire survey area, falls within the traditional territory of the Nga Mahanga section of the Taranaki tribe.

This paper reports the results of four weeks mapping of sites of the Tataraimaka district by one field team in November and December 1980. Most sites were mapped by alidade and plane table, while a few, where topography and vegetation cover required, were surveyed by tape and compass and 'dumpy' level. A further two weeks in the field in April and May 1981 allowed checking of plans and the location and recording of some further sites which are now too badly damaged for useful mapping.

The survey area falls within the NZMS1 series map N108 (New Plymouth). Map references are from the third edition, 1970. Site numbers refer to the New Zealand Archaeological Association site recording scheme. Names ascribed to pa were obtained from the original Lands and Survey Department blocksheets covering the Wairau and

Cape Survey Districts, which are now held in the Lands and Survey Department, New Plymouth. The 1950 aerial photographs referred to are from the New Zealand Aerial Mapping Ltd (Hastings) series, which are held by the Lands and Survey Department.

The distribution of pa within the surveyed area is shown in Figure 1. Presentation of individual sites is organised geographically by stream or river catchment areas, working in general from east to west through the surveyed region.

N108/180 (533813)

On the Lands and Survey Department Blocksheets Cape III (14/5A) two Maori fortifications are shown on the left bank of Waimoku Stream at the Egmont National Park boundary. Just outside the park boundary, within the sharp left bend of the stream, is a work depicted in stylised form as a ring-ditch pa, which is given the name 'Waimoku' (map reference 534817). No trace of this site has survived. The area was cleared of light bush about 1960, and the destruction of whatever was there presumably dates to that time.

Up the same spur, just within the national park boundary, the Blocksheet shows another, larger, work. This pa has survived, although considerably damaged during the removal of pine trees from this part of the park, again about 1960. The site is located *ca.* 200 m above sea level, on the prominent forward knoll of a ridge which descends from the Kaitake Ranges. It commands an extensive view to the north and west. To the east is the deep cut gully of Waimoku Stream, while westwards is a precipitous slope down to the rising ground about the main road. At the north end the spur rises easily from the site of the now vanished Waimoku pa. At the south end is a broad saddle, very little below the occupation platform of the fortification. The site is now covered by mamaku, mahoe and other native species, with a tangle of felled pines in places.

Artificial works comprise a bank which encircles the site, supplemented by a ditch for most of the circumference. At the north end the scarp rises 3.5 m high from a 6 m wide terrace. Elsewhere it is lower, although the extent to which the ditch has been filled makes accurate assessment difficult. At the south end of the site is an especially well formed ditch and bank defending the most vulnerable approach. Log-hauling tracks cut through the defences in many places. The defended area is *ca.* 120 m long, with an area in excess of 2500 m². The south end of the occupation area is *ca.* 30 m wide. Approximately halfway down the site to the north the platform dips away and narrows to as little as 15 m. Close to the transverse defence at the south end are indications of perhaps three or four *rua*.

Patuha N108/157 (547788)

Patuha is situated on the Kaitake Range at *ca.* 600 m above sea level, on a steep ridge which falls to the south-west from Patuha peak (and trig station). The knob which is occupied by the pa is a prominent one and is easily visible from farm country and the main road in the Tataraimaka area. The site is now under bush with some higher rocky ground under grass. Although tree roots have undoubtedly broken up sub-surface deposits, the site is probably in fair condition since it has not suffered from farming activity and the rocky spine of the ridge has prevented natural erosion.

The fortification is protected by its remote and commanding location within an extensive area of broken bush country. Access down the ridge is barred by a low saddle

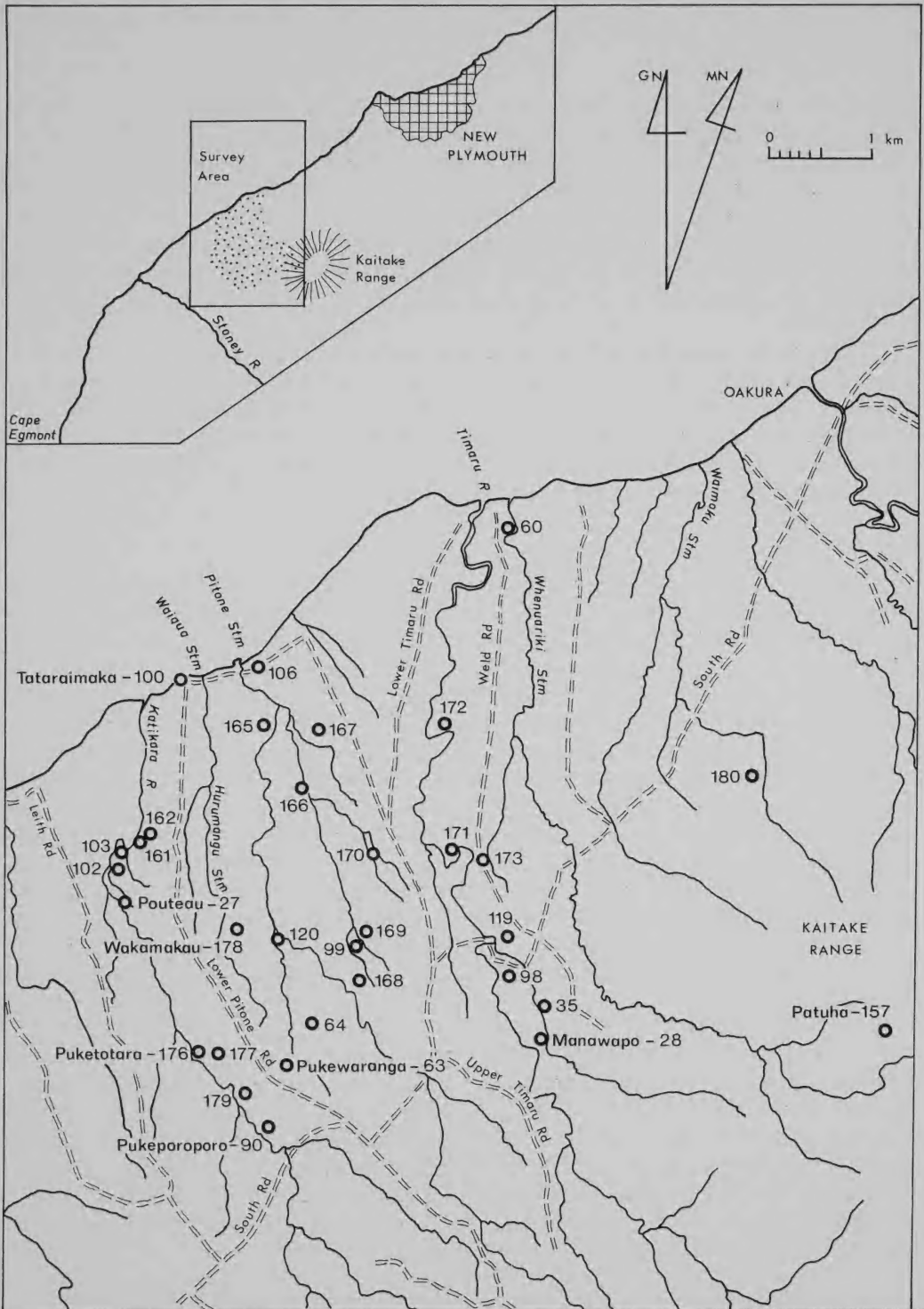
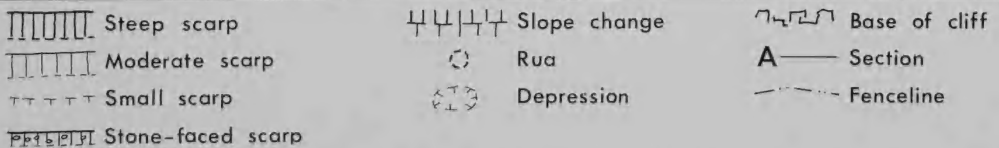


Fig. 1. Distribution of pa in the Tataraimaka district, Taranaki.



Key for Figs. 2, 6, 8, 10, 12, 16, 19, 21-28, 33, 35, 36.

leading to a precipitous 30 m face which rises directly to the occupation area. Access up the ridge is increasingly steep and narrow as the pa is approached. The two flanks of the site fall steeply 150-200 m into adjacent valleys, with a 100 m cliff near the western end making the pa virtually impregnable at this point. Despite the precipitous flanks of the site, however, it would be difficult to guard all points against an approach through the bush to close beneath the defended area. Artificial defence may be present in the form of a cutting away of the toe of the face which drops to the saddle up the ridge. The naturally rocky and precipitous spur rules out identification of other defensive modifications.

The total occupation area is *ca.* 100 m long and varies between 10 and 20 m width. It consists of two high points and a connecting saddle some 8-10 m lower. The upper high point is the larger and includes a side spur which extends 30-40 m to the north. There are several prepared platforms and terraces on this high point which may have an area of between 600 and 800 m². Two *rua* were found on the site including one in the intervening saddle and one on the major high point.

Manawapo N108/28 (513787) Figs. 2, 3, 4

Manawapo is situated on a long ridge which extends north-west from the southern margin of the Kaitake Range between Timaru River and Te Komete Stream. Nearby fortifications are N108/98, at the end of the ridge 700 m north-west of Manawapo, and N108/35 across the gully to the north. The upper occupation platforms of the pa stand 40-50 m above the river to the west and perhaps 20 m above the narrow gully of Te Komete Stream to the east. The name is given by W.H. Skinner in his *Reminiscences of a Taranaki Surveyor* (1946:64) where the pa is numbered among the major fortifications of the Tataraimaka district along with Pukeporoporo (N108/90), on the right bank of Katikara River, and Tataraimaka itself (N108/100). Manawapo is now under pasture, with scattered trees including karaka, rewarewa, totara and cabbage trees on the site and remnant patches of bush outside the defences to the north-west and in the nearby river valley. Most of the scarps, ditches and platforms are in good or excellent order; at some time in the past, however, there has been considerable bulldozer preparation of farm tracks along the east and south-west margins of the site, through the defences of the north end, and cutting banks and scarps in many places to give wheeled access to all the major occupation platforms.

Topography gives Manawapo excellent natural defence. From its elevated situation it commands a useful view across neighbouring valleys and over spurs and terraces beyond. The two flanks are well protected by precipitous slopes into adjacent gullies. Major occupation platforms stand more than 10 m above a narrow saddle to the south. Higher ground in this direction is reached *ca.* 100 m from the fortification's outer defences. At the north end of the site is another saddle, beyond which a large area of higher ground extends to N108/98. This is the most vulnerable quarter of the pa with an easy approach along the ridge and by way of a moderate slope to the west.

Artificial defence is complex and includes a variety of ring-ditch and transverse works. The site is basically made up of two major independently defensible platforms with other defended occupation areas at lower levels to the north, north-east and south. For the purpose of description, external defensive works will be examined first; internal defences will be examined later in discussion of the various occupation platforms.

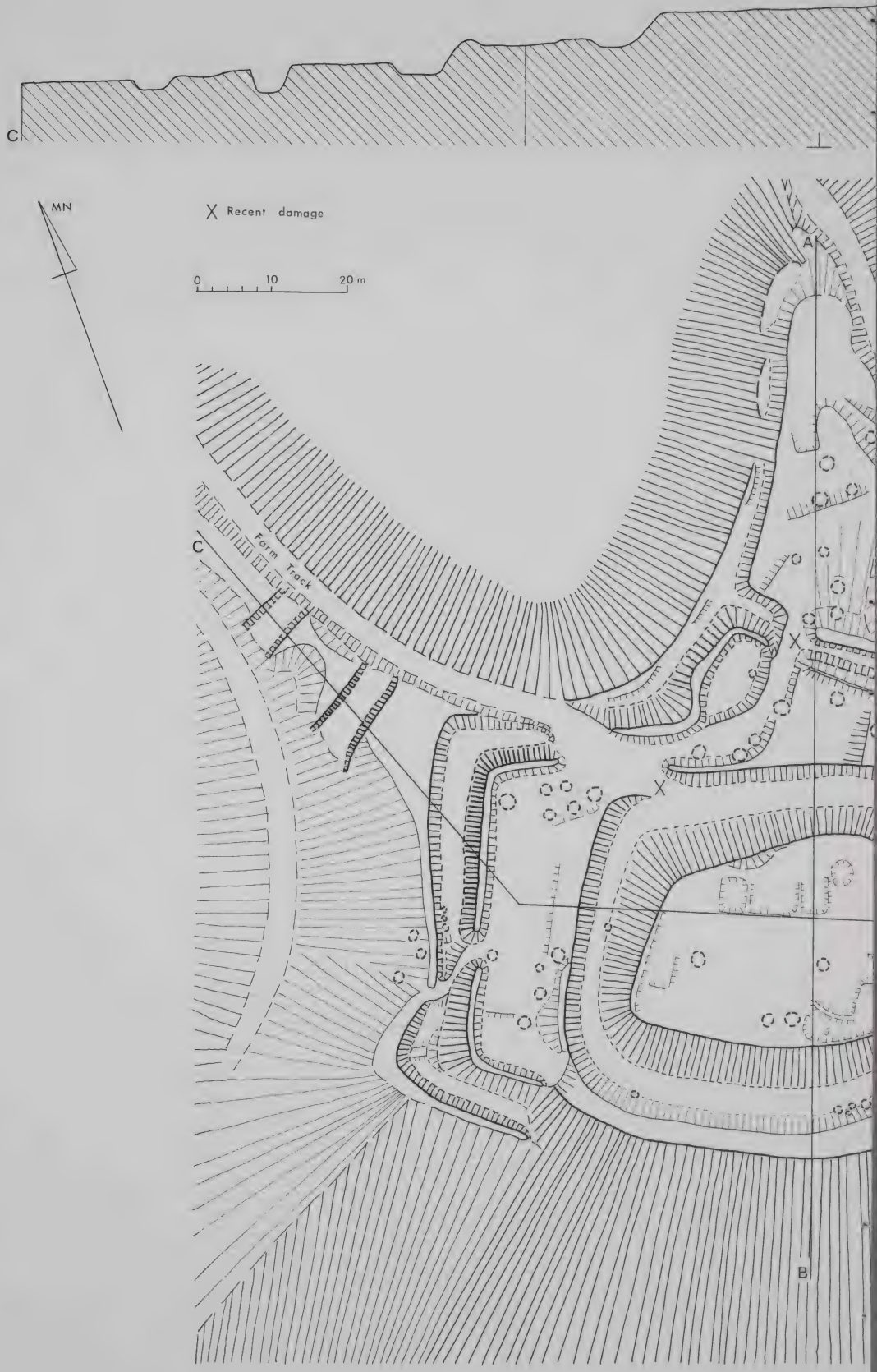
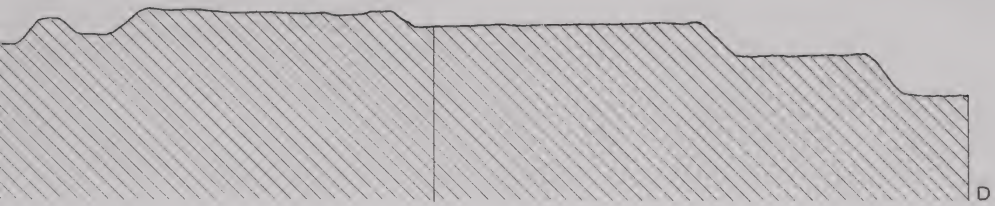


Fig. 2. Plan and section



Manawapo

N 108/28





Figs. 3,4. Manawapo. 3. Aerial view from the south (1974). 4. Aerial view from the south-west (1974). N108/35 can be seen at the end of the spur upper left.

At the vulnerable north end of Manawapo, two major ditches *ca.* 4 m and 6 m across cut the narrow spur. To the rear of these is an abrupt ditch and bank which extends around a large lower platform at this end of the site. Beyond the farm access track, which now cuts this defence, the ditch and bank continues down the flank of an extensive defended area occupying a spur which falls away toward Te Komete Stream. On the other side of this spur no ditch survives: the present bulldozed track along the flank of the pa may make use of earlier ditch and bank defences, but it seems more likely that the precipitous drop into the gully itself provided sufficient defence. At the south end of the site successive terrace and scarp defences, 5, 4 and 2 m in height, confront any advance down the ridge. Above the Timaru River, on the west side, the major artificial defence is provided by sections of ring-ditch defence, now badly damaged in places, which encircle the two major platforms.

Within the fortification are two major occupation platforms, the two ring-ditches of which are separated by a 2-3 m high bank. This bank curves around the higher, southerly, platform, suggesting that this was the initial defence at the site. This higher platform is 16-18 x 28 m (440 m²) in size. At its south end the ditch does not quite cut the ridge to complete the encircling defence. At the north end the remains of a badly damaged wall can be seen on the platform rim. On the platform are four (perhaps six) *rua*, while slight scarps and depressions indicate preparation of areas for houses or other structures. Below the platform to the south are two subsidiary terraces with scarp defence which give space for a further five *rua*. These two terraces give an additional 450 m² living space. The ditch in this part of the site contains four more *rua*.

The second major living platform occupies a central position in the site and may be regarded as the key defended area. The platform measures 20-28 x 28-36 m, giving an area of *ca.* 650 m². Around it is a 4-6 m high scarp which falls directly into an unusually massive ditch. At the two ends of the platform are the usual banks which add to the defensive strength of the platform. On the platform itself are at least five *rua*, and several slight terraces or depressions. Especially interesting among the latter are three adjacent rectangular depressions extending along the north-east side. In the ditch which surrounds this platform (and in one place extends out to the eastern side of the ridge) are thirteen *rua*. Following the usual pattern these are generally dug into the foot of the platform scarp or opposite counterscarp.

At the north-west end of Manawapo is a defended occupation area with its rear to the ring-ditch of the central platform and its front and sides defended by a major ditch and bank. The unusually strong bank stands 1 m above the defended area and 4.5 m above the bottom of the external ditch. The platform is more than 40 m long and 12-16 m wide, giving a living space of *ca.* 480 m². There are eleven *rua* on the platform itself and a further six in the ditch outside and on the adjacent approach to what appears to be original access into the pa.

A major subsidiary defended area is located on a spur which dips north-eastward to the valley of Te Komete Stream. Here an upper platform sloping to the north-west is separated by a ditch and bank from a more extensive, lightly defended area which occupies the top of the lower spur. The upper platform is about 12-18 x 36 m (*ca.* 500 m²). At its north-west extremity it extends to the adjacent north-west platform. The ditch and bank which runs without a break around both these platforms provide a major line of defence forward of the key inner platform and barring the most vulnerable approach to the

fortification. The farm track which now cuts the defences where these two platforms meet has uncovered a stone-lined hearth situated next to the former bank. The living area south of this has its sloping platform divided into several major terraces occupied by a total of eight *rua* and some minor platforms and terraces. A massive pit at the lower end of the platform appears to be a modified natural feature. Beyond the ditch and bank defence of the north-east flank of this platform the spur slopes away for more than 40 m before dipping sharply to the stream. Here is a lightly defended area of *ca.* 650 m² occupied by several terraces and nine or ten *rua*.

The massive and complex defences and the size of the defended area make Manawapo one of the outstanding pa of the entire survey area. The ditch and bank defences of the north end extend 40 m forward of the living area and 65 m forward of the central inner platform, while at the south end, terrace and scarp defence 50 m deep must be overcome before the smaller inner platform is reached. The fortification extends 190 m along the ridge and as much as 110 m across it. The total area of the site is *ca.* 8000 m², of which the available living space makes up *ca.* 3300 m². It must, however, be borne in mind that ditches could have uses other than simply for defence: for example, on Manawapo at least twenty *rua* are cut into ditches. The total of almost 70 *rua* recorded on the site must be a minimum number, with many others now hidden, especially at the favoured location at the foot of the scarps.

N108/35 (514791) Fig. 5

N108/35 is situated at the end of a spur which extends northward between two branches of Te Komete Stream. Approximately 300 m to the south is the major fortifica-



Fig. 5. N108/35 — aerial view from the south-east (1974). The picture shows the site before it was substantially damaged in 1976.

tion of Manawapo. The pa occupies a surprisingly commanding position above adjacent gullies and terrace country to the east and west. In the 1950 aerial photograph (1790/8) the site is invisible under pines. Some time before I first visited the site in late 1974 the pines were removed with some damage done to the defences. In 1976 earthworks for the Maui gas pipe line saw part of the spur cut down 4-5 m and half the fortification completely destroyed as a result. What remains is under pasture.

Natural defences of N108/35 consist of steep 20 m falls into gullies on both flanks. At the north end is an easy approach from the stream fork, while the southern end offers no natural obstacle to an approach down the flat topped spur. Artificial defences appear to have consisted of a single ring-ditch which encircled the large occupation platform cutting through the spur where it narrowed at the south end. A bank of the usual form topped the platform rim at the vulnerable south end.

The single occupation platform of this pa was 20-30 x 45 m, giving a defended area of *ca.* 1100 m². Approximately 23 m now remains of the length of the platform, with what remains having a maximum width of 29 m. No *rua* or other evidence of internal organisation are visible on the remaining platform.

N108/98 (510793) Figs. 6, 7

N108/98 occupies a spur end between Timaru River and Te Komete Stream — the spur now cut below the site by the main road. The site is in good condition under grass. Remnant native bush, including rewarewa, lancewood, rimu and kawakawa, survives on the steep slope to Te Komete Stream.

The pa holds a naturally strong high point at the north end of a ridge which is also occupied by the great pa Manawapo *ca.* 700 m to the south. It completely commands the lower ground south along the ridge, as well as the westward slope down to the Timaru River. The marginally higher terrace edge to the north-east is 100 m away across the 20 m deep gully of Te Komete Stream. Artificial defences consist of a single ditch which rings the site except possibly at the precipitous eastern side. The platform rim rises to be almost a metre above the platform at the vulnerable south end of the pa. A causeway crossing the ditch at the north end appears to be an original feature.

Within the defensive bank at the platform rim the effective occupation area is *ca.* 540 m² (18 x 30 m). Six holes are dug into the site along the eastern and western margins of the platform and, on the eastern side, a little below. These are 1.2-1.5 x 2.5-3 m in size and are mostly *ca.* 1 m deep. Local knowledge indicates they are Second World War rifle pits and their command of the main road support this. Just outside the pa defences at the south end, on the west side of the spur, is a single terrace *ca.* 4 x 2 m.

N108/119 (508798) Figs. 8, 9

This unusual fortification is situated on top of a 30-40 m cliff on the right bank of Timaru River. It is visible over the river from the main road. Six hundred metres to the north is the now destroyed pa N108/173, while 400 m south, across the gully of Te Komete Stream, is N108/98. The present landowner reports former extensive shell middens at the western margin of the terrace to the north. The site is in good order. A farm road cuts the eastern defences; it is reported that some cutting away of the inner platform has occurred next to the road and that at least one hole on the site is a Second World War

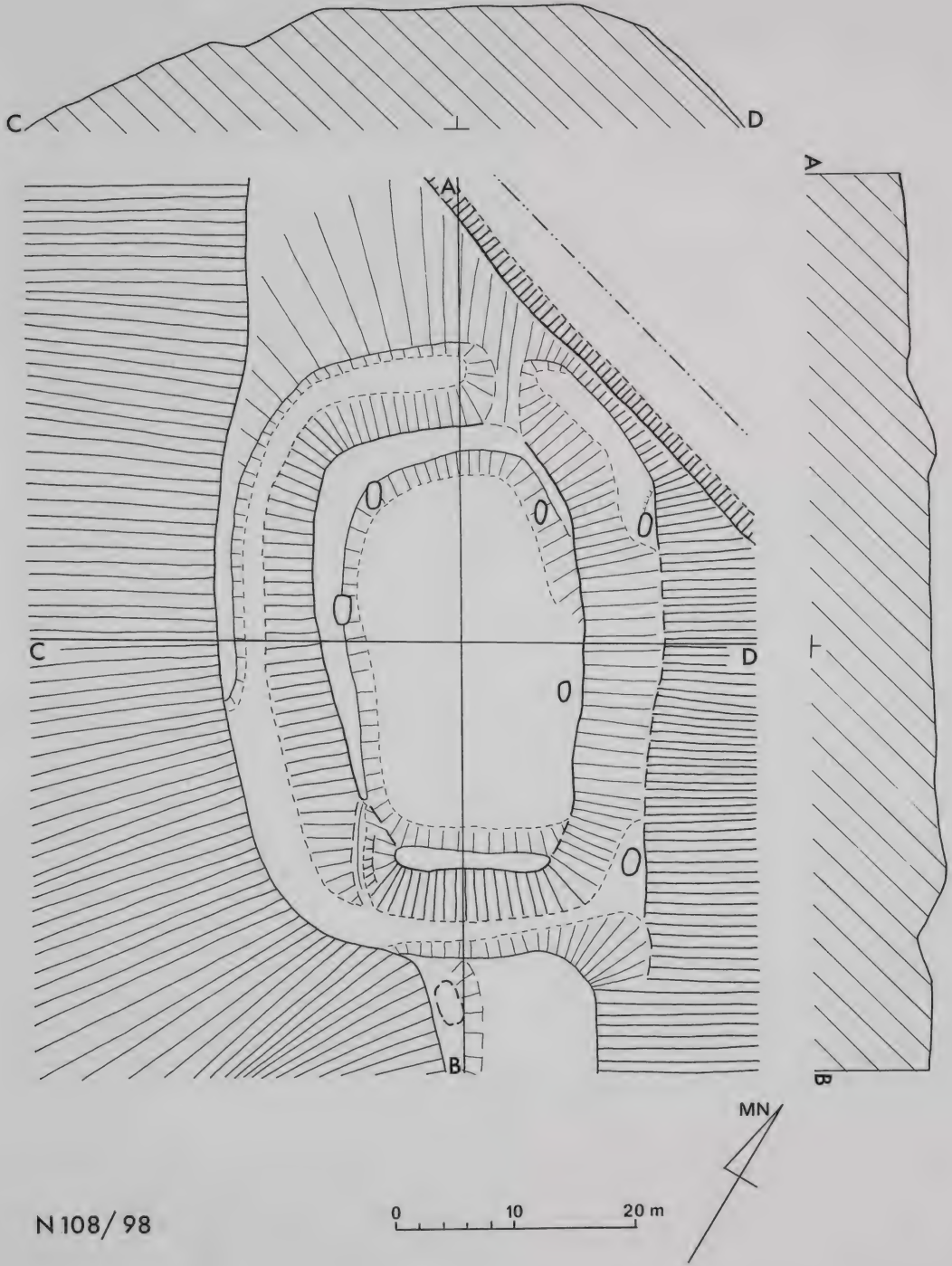


Fig. 6. Plan and sections of N108/98.



Fig. 7. N108/98 — aerial view from the east (1974).

rifle pit. The site is now under pasture with a solitary rewarewa standing on the outer platform. Some karaka, mahoe and kawakawa survive on the south and east margins of the inner platform, and macrocarpa trees stand on the south-east transverse defence.

N108/119 occupies the narrow southern point of an extensive terrace. Natural defence includes the cliff to the river south of the inner platform and a steep scarp to the riverside flat along the west side. To the east is a broad gully *ca.* 10 m deep. The fortification has two separate defensive works enclosing two platforms. An outer ditch and bank extends from the scarp on the west side of the site, around the outer platform, to disappear where it is now cut by the farm track. At the centre the counterscarp is 1.5 m high and the main scarp to a substantial bank is 2.5 m. At the rear of this platform is a more massive defensive work enclosing the inner occupation area. Here the ditch extends around three sides, from cliff to cliff. The main scarp is more than 4 m from the bottom of the ditch to the top of an inner bank which continues strongly around two sides. A now shallow transverse ditch cuts the low cliff-top ridge south-east of this platform.

Of a total area taken up by this pa of *ca.* 3500 m², the two occupation platforms together total less than 1000 m². On the strongly defended inner platform of *ca.* 300 m² are six *rua*, and a large open pit which may be a collapsed *rua*, or perhaps the Second World War rifle pit. On the outer platform of *ca.* 625 m² are only two *rua*. Both platforms possess slight scarps forming terraces for surface structures. The outer platform has the appearance of providing additional living space, some time after the throwing up of the inner position as the initial fortification at the site.

N108/173 (507805)

Weld Road cuts through a Maori fortification *ca.* 700 m towards the sea from the main road corner. The work was strategically situated on a narrow ridge between

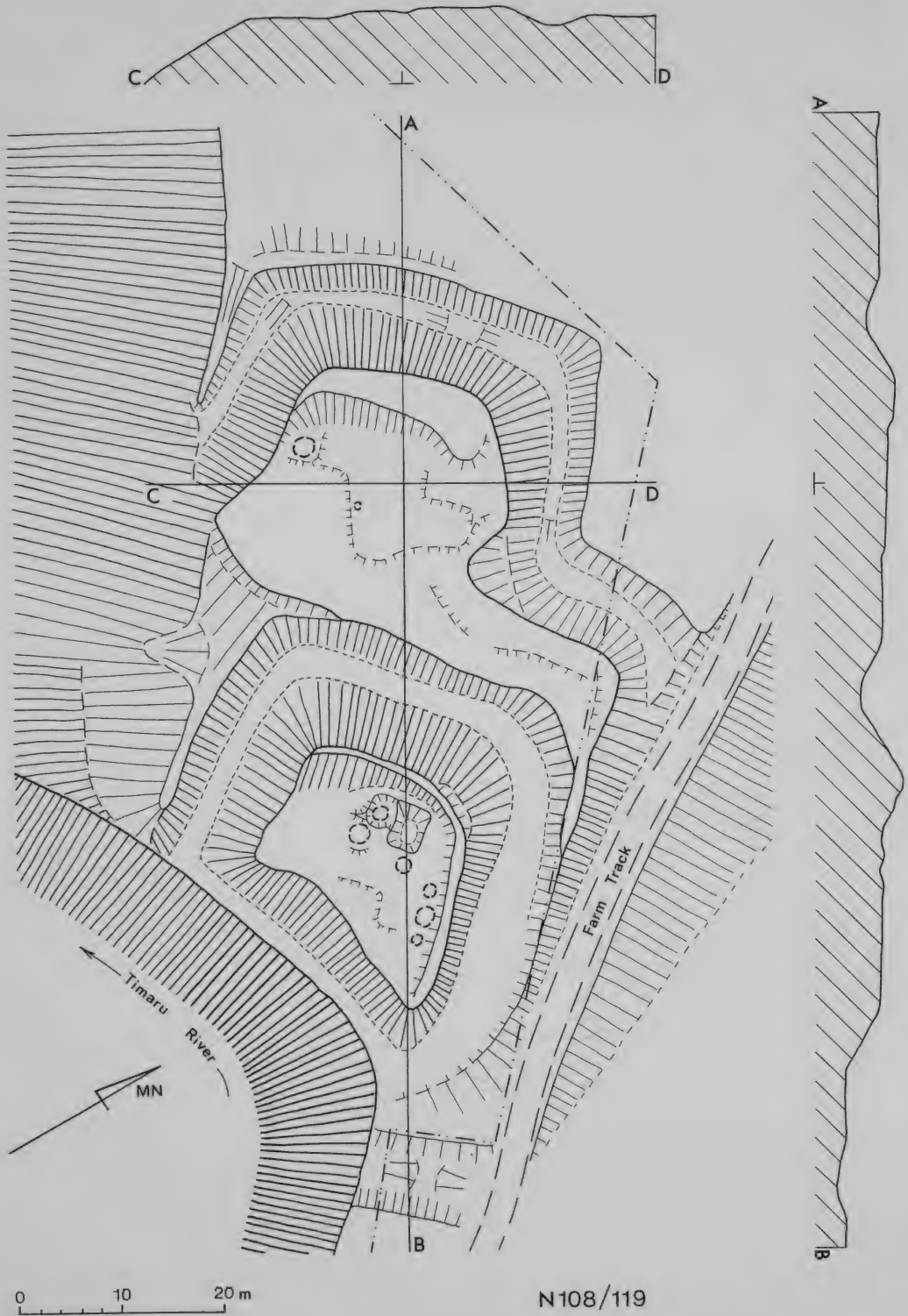


Fig. 8. Plan and sections of N108/119.



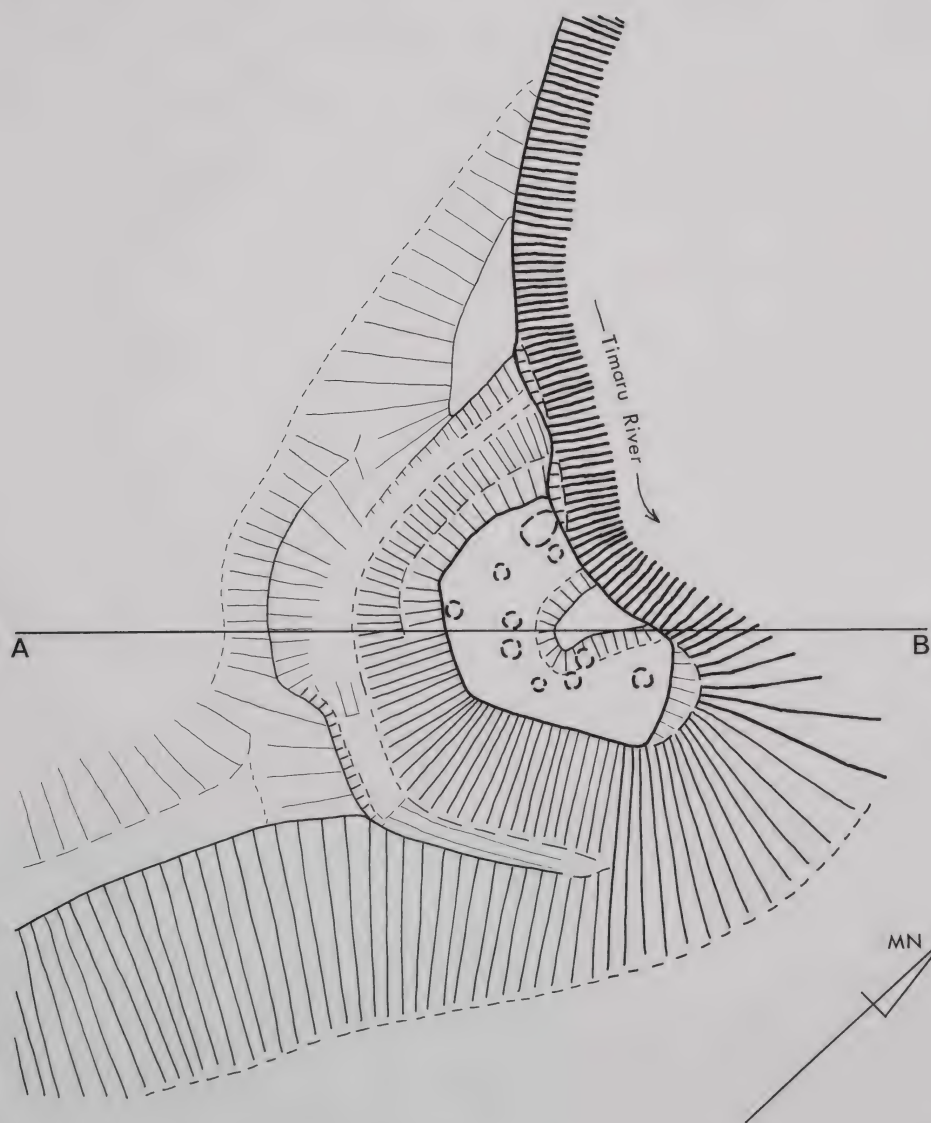
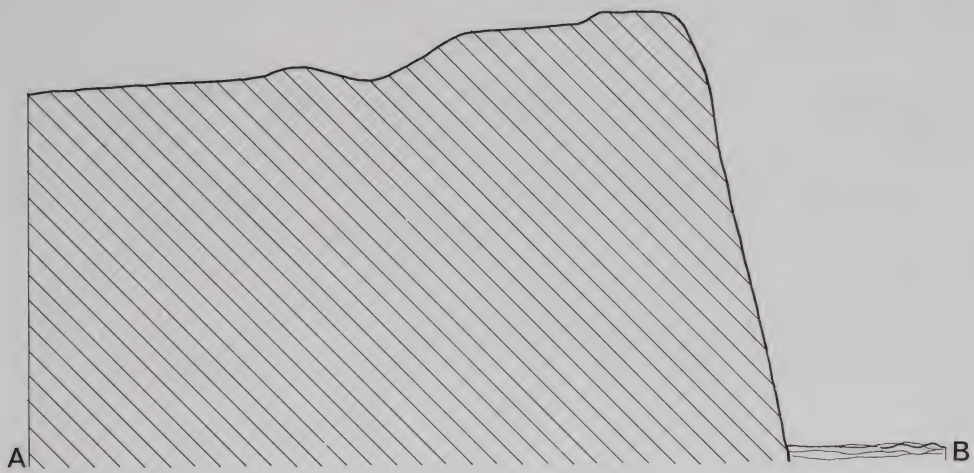
Fig. 9. N108/119 — aerial view from the east (1974).

Whenuariki Stream and a minor tributary of Timaru River. It thus holds the route by the easy terrace country up the right bank of Timaru River to the great fortification of Manawapo less than 2 km to the south. In the 1950 aerial photograph (1790/8) the site shows clearly under pasture and scrub. The road trims off the west side of the occupation platform and cuts through the defences at each end; the remainder of the pa is intact. The site was completely destroyed in the early 1950s. All that survives is the very faint suggestion of an infilled ditch east of the road.

N108/173 occupied a commanding situation, not only dominating the 15 m deep gullies east and west, but possessing a useful view over the extensive terrace country south to the ranges and for some distance north. To the west it also commands the valley of the Timaru River with the nearby pa N108/171 low on the right bank. The aerial photograph shows a roughly four sided ring-ditch work with an additional transverse ditch at the north end. The single occupation platform appears to have been *ca.* 12-15 x 25 m giving an area of perhaps 300 m².

N108/171 (505806) Figs. 10, 11

This tiny fortification stands on a 20 m cliff above the right bank of Timaru River (where the river takes a great loop so that it actually flows southward below the north-east flank of the site). It is visible from Weld Road where the road cuts through the nearby pa N108/173. The site is now under pasture with native vegetation clinging to the cliff below,



N108/171

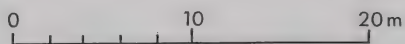


Fig. 10. Plan and section of N108/171.



Fig. 11. N108/171 — view from the south-west (1980).

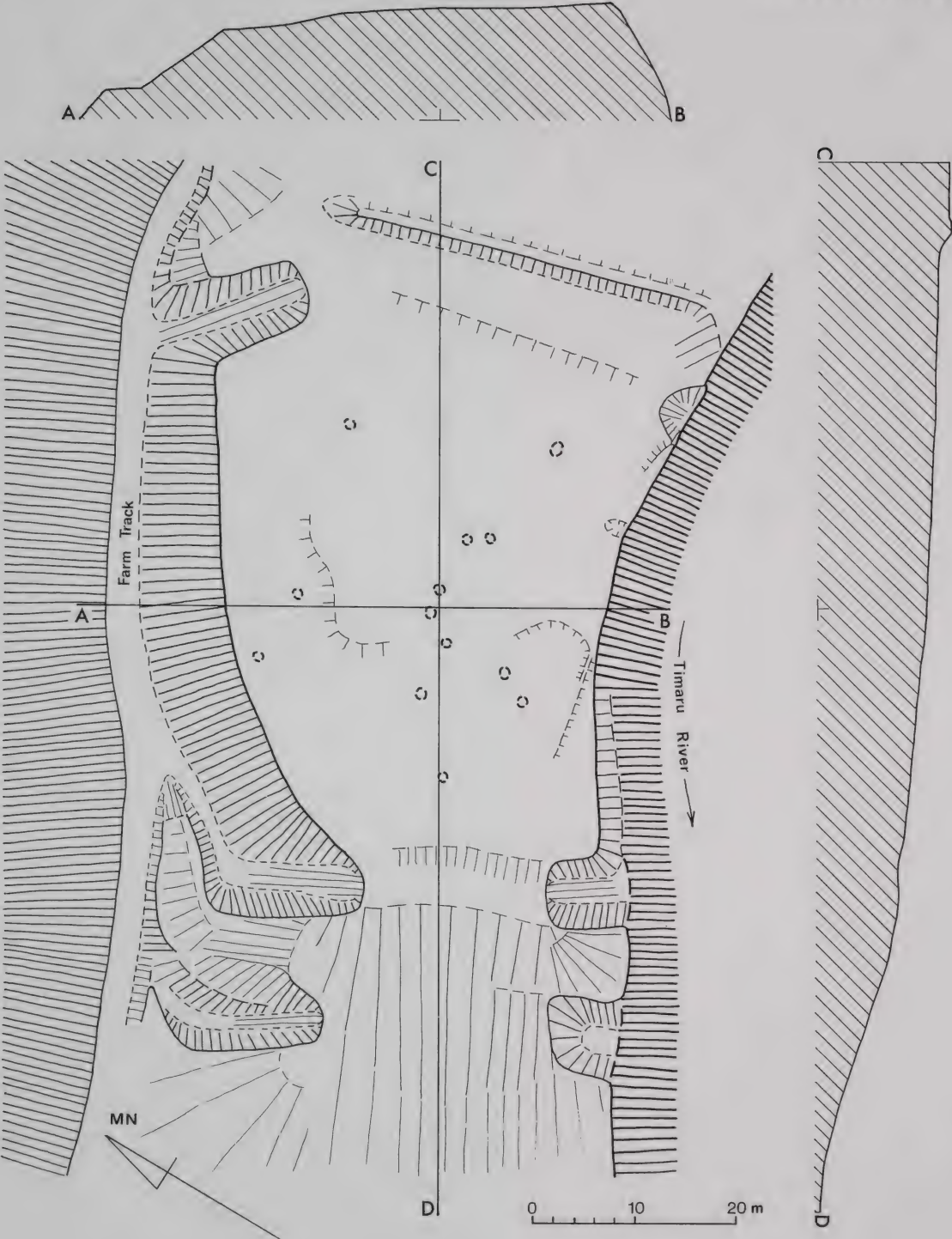
and remnant ponga, mahoe and other species surviving on the steep hillside to a lower river flat to the south-east. N108/171 is in excellent condition: limited damage to the lower parts of the outer bank is probably the result of recent cultivation.

The fortification occupies the corner of a spur which runs south from nearby higher ground, and then south-west for 40-50 m before dropping to the river. Strong natural defences are provided by the cliff to the rear and by the precipitous 15 m scarp south-east to a lower river flat. The platform has a slight advantage over the nearby spur for 20-30 m before the spur rises to the north to completely command the site. The platform stands 4-5 m above the adjacent river terrace to the west. Artificial defences comprise a single ditch which runs from the cliff on the north side of the platform, around the west and south-west sides, and then runs out some 10-12 m down the steep scarp to the lower flat. Most of the defence of the precipitous south-east flank is thus left to the natural scarp. The platform scarp of the west side is 3 m high.

The occupation platform is only 9 x 15 m at its greatest extent. The defended area is perhaps 90 m², this area being further reduced by a block of ground at the rear which is 60 cm higher than the remaining usable platform. On the platform are ten *rua* which together leave little room for surface structures. It seems likely this fortification served simply to store food grown in adjacent gardens in the sheltered valley bottom.

N108/172 (505817) Figs. 12, 13

N108/172 is located on a broad spur on the right bank of Timaru River *ca.* 2 km from the sea. Its situation is low in the river valley with a useful view only over flats in the valley bottom, especially north towards the river mouth. In the 1950 aerial photograph



N108/172

Fig. 12. Plan and sections of N108/172.



Fig. 13. N108/172 — aerial view from the north-east (1975).

(1789/6) it is clearly visible under light scrub. Since then, however, the scrub has been removed and the transverse defences substantially damaged. The lateral ditch along the north side has also suffered damage and now provides the basis for a farm track down the spur. Damage to the living platform is less clear. The site is under grass.

Natural defences consist of a 20 m cliff to Timaru River on the south side and a precipitous 20 m scarp northward to an extensive river flat. To the west transverse defences cut the broad spur where its generally easy slope makes a slight dip. At the east (up-spur) end the easy approach offers no assistance to artificial defences. A ditch and bank extends around three sides of the pa. Along the north side the ditch is 6 m below the platform rim. The existence of the outer bank here can be noted from the 1950 aerial photograph although its precise nature can no longer be determined. At the east end difficult remaining evidence suggests there was only one transverse ditch with a bank *ca.* 8 m forward of it to act as additional defence. It is possible, however, that this bank relates to a second ditch — the aerial photograph is unclear on the point. At the west end a second ditch cuts the spur to give 20 m depth to the defences, adding weight to the possibility of there being a second ditch at the more vulnerable east end as well.

The occupation platform is 24-42 x 48-54 m, allowing a defended area of *ca.* 1800 m². Occasional very slight scarps survive on the platform which dips to the west. Thirteen *rua* may be representative of more which are now invisible following the general damage to the site.

N108/60 (509837)

Until recent years the remains of a large pa could be seen cut by Weld Road and taking up the narrow seaward end of the ridge between Whenuariki Stream and the right bank of Timaru River. The fortification is now virtually destroyed, although difficult surviving evidence, along with the 1950 aerial photograph (1788/4), does allow some reconstruction of what once existed. Only a 2 m length of the southern defensive ditch remains untouched between the road cutting and the adjacent fence. The site is now under grass.

Natural defences of N108/60 are strong, with a narrow waist of land connecting with the terrace country to the south and steep slopes to the valleys east and west. To the north the spur dips towards the beach about 200 m away, rising again over a low saddle to a knoll which has terraces but no sign of related defence. Artificial defences appear to have consisted of three successive transverse ditches at the south end over a total depth of more than 70 m, with the inner bank and platform scarp the most massive. These are clear in the 1950 aerial photograph although Weld Road, where it dips to the beach, has already destroyed the west end of the outer bank. A terrace runs along the east flank and north end of the occupation platform providing two scarps for terrace and scarp defence. Above the precipitous west flank is a single terrace and scarp defence.

It is difficult now to establish the size of the occupation platform of this pa. The triangular inner platform appears to have been *ca.* 75 x 135 m in size, with additional living space north and west within the destroyed terrace and scarp defensive works. To the south the 20 m and 40 m gaps between successive transverse ditches also offer living space, especially on the substantial 22 x 40 m platform within the outer ditch. The defended area may total between 5500 and 6000 m².

Pukewaranga N108/63 (487785) Figs. 14, 15

Pukewaranga is located on a prominent hill which stands above the surrounding countryside in the headwaters of the Pitone Stream, *ca.* 200 m east of Lower Pitone Road. The site is now mostly under pasture. Remnant native trees include karaka, ngaio, mahoe, kawakawa and ponga on the scarps, and scattered kawakawa and mahoe on the platform. Three massive pines dominate the southern corner of the site. The earthworks are mostly in good order with some erosion of the steep scarps which appears mostly to have been initiated by stock. Three stock tracks, which may follow older access to the platform, pierce the rim near the north-east corner. Quarrying for fill below the north-east end of the site appears to have left the defences undamaged.

This fortification occupies a strong situation on top of a commanding hill, with excellent views all round, especially to the north and west. To the east the defences fall steeply away *ca.* 30 m into the neighbouring gully. Westwards is a drop of 15 m to uneven terrace country which extends beyond the present road to the rim of the Katikara River valley some 300 m away. The nearest ground higher than the pa is *ca.* 150 m to the south. Major artificial defence consists of a single encircling ditch and bank. The ditch is well formed and massive, as much as 10 m across, with a counterscarp up to 2 m and a main platform scarp of between 3 and 4.5 m. Present indications are that access into the ditch was at the south and east corner. At the platform rim is a substantial defensive bank, 1.6 m above the adjacent platform at the higher south-west end of the site, and up to a metre high along the north-west side. A bank also appears as a slight rim on the south-east margin and is again barely visible at the north-east end.

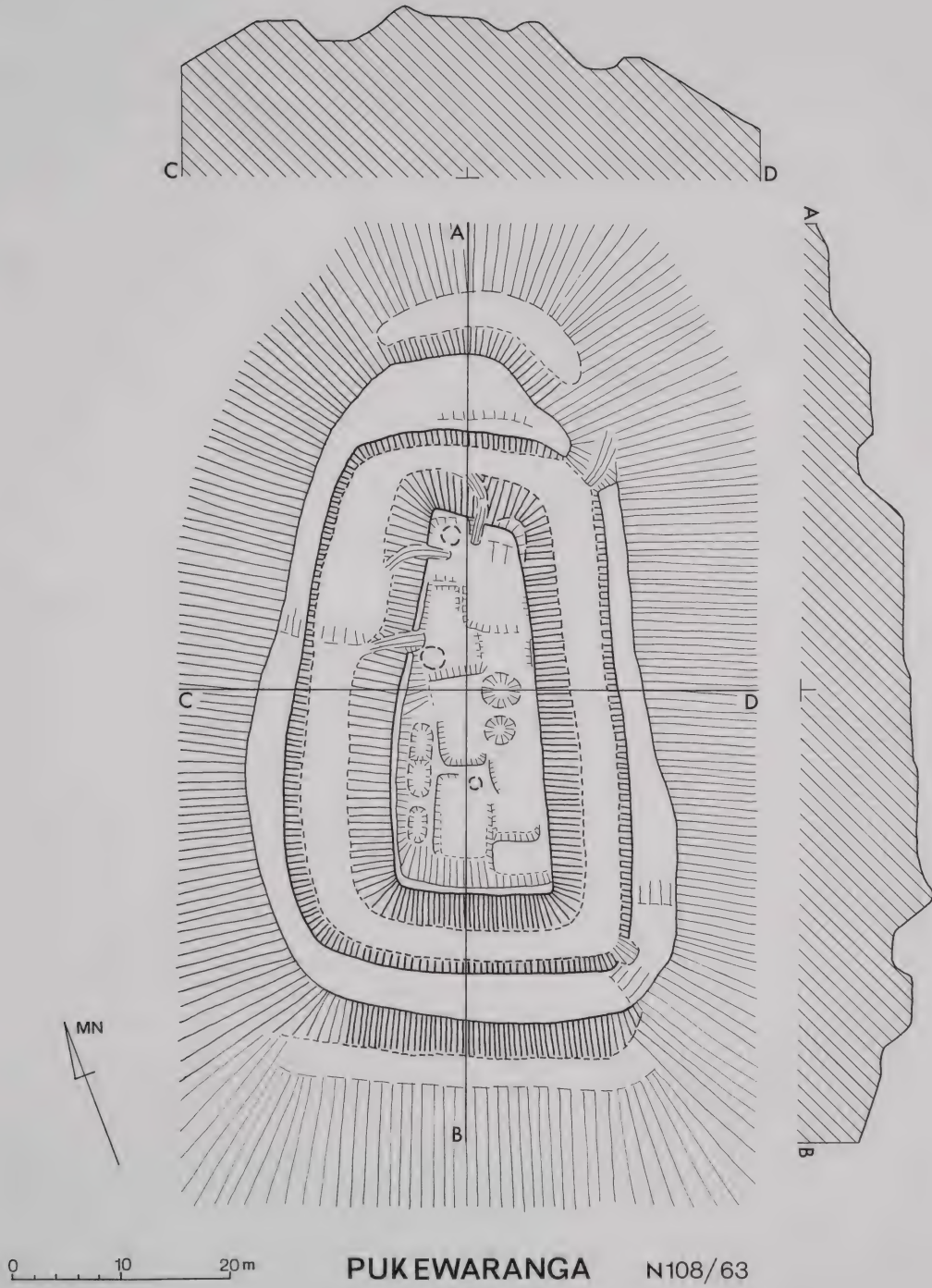


Fig. 14. Plan and sections of Pukewaranga (N108/63).



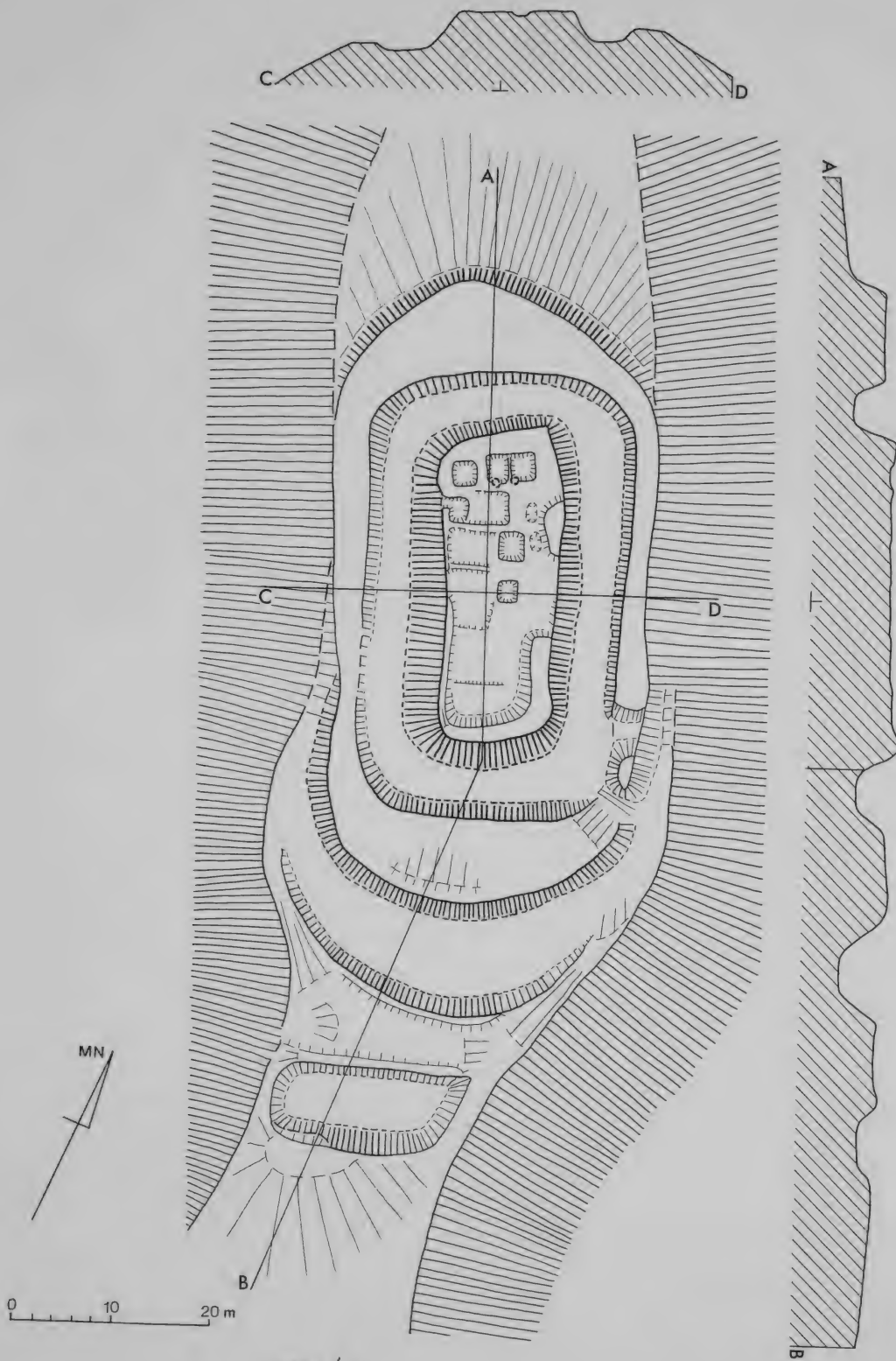
Fig. 15. Pukewaranga — from the south (1981). N108/64 is beneath native bush to right.

The occupation platform of Pukewaranga is 8-14 x 34 m, giving a defended area of *ca.* 425 m². The platform dips almost a metre from the south-west end to the north-east, and also falls away across the site from the defensive bank of the north-west side. On the platform are a number of prepared terraces separated by minor scarps or banks. At least five such terraces provide space for a rather greater number of houses or other surface structures. Dimples of the usual form indicate three *rua*, while another two massive holes up to a metre deep may indicate collapsed *rua* or perhaps open pits. Three elongated pits at the western corner of the platform appear to owe their origin to open pits of a rectangular plan. A marked terrace which curves more than 20 m around the face of the hill outside the defences of the north-east may have provided additional occupation space, or may be connected with access through the defences nearby.

Pukewaranga is markedly similar to the nearby fortification of N108/64 at the head of the adjacent gully *ca.* 400 m to the north-east. Both sites have massive ditches defending occupation platforms of *ca.* 400 m², and both have unusually large defensive banks on their platform rims. On their occupation platforms the two pa share complex terracing arrangements, and pits of two uncommon forms: the deep square open pit and shallower, elongated open form. Their proximity to one another and their common features combine to suggest a close historical association.

N108/64 (491789) Fig. 16

N108/64 is located at the head of a minor tributary of Pitone Stream, between Pitone and Timaru Roads, *ca.* 3.5 km from the sea. The site is on a slight spur which divides the valley. It is now under bush, except for the outer ditch and bank of the south end which is under grass and the adjacent bank under gorse. Karaka and kohekohe make up most of the canopy with karaka predominant, including many large trees on the occupation platform



N108/64

Fig. 16. Plan and sections of N108/64.

rim and the encircling scarp. Understorey vegetation includes mahoe, mapou, hangehange, kawakawa and mamaku. The site is generally in excellent condition with almost vertical scarps still abundant. It is, however, open to stock which are causing some severe local damage.

This pa occupies a typically low-lying situation 6-10 m below the general level of the surrounding terrace country. At the south end higher ground is *ca.* 50 m away over a slight saddle. Both flanks of the site drop steeply 8-10 m into narrow gullies, beyond which the higher terrace edge is *ca.* 60-80 m from the occupation platform. At the northern, down-spur, end a relatively easy slope extends *ca.* 40 m down to the fork of the stream. Artificial defences consist of a ditch and bank which ring the occupation platform, with two additional ditches securing the vulnerable south end. The outer transverse ditch at the south end is 1.5 m deep. It does not quite cut the spur, and so allows access at both ends into the fortification. Between this and the second transverse ditch is a bank 6-9 m broad with a slightly raised rim at both margins. The second ditch is up to 4 m deep. The next bank here is under dense gorse: what investigation was possible suggests a marked decline from a high outer rim to the top of the inner scarp. The occupation platform itself is surrounded by a scarp 4-4.5 m in height. Much of its rim is surmounted by a marked bank which is as much as 60 cm high at the south end.

The powerful defences of this site defend a rectangular occupation platform 11-12 x 31 m, *ca.* 350 m². On this platform is considerable evidence of internal organisation including slight scarps and banks dividing off rectangular areas which it may be presumed were prepared for houses or other structures. Four large square pits about 1 m deep defy easy interpretation — they may be for storage, but are quite unlike the usual underground *rua* used in Taranaki for this purpose. Two of them provide access into deeper *rua*. Two other square depressions are not as deep. Two smaller open pits are about 1 x 2 m.

N108/120 (486797) Fig. 17

N108/120 is located within a fork of Pitone Stream *ca.* 2.5 km from the sea. In the 1950 aerial photograph (1790/6) it shows up well under gorse; it has since been virtually destroyed. The remains of the site are under pasture.

This pa is situated on an unusually low spur end within a gully. It is dominated from higher ground at both sides and commands only the undulating spur southwards which extends 100 m before rising above the site. The occupation platform appears to have been only 5-10 m above the bottom of adjacent gullies. Artificial defences can be determined by means of the 1950 aerial photograph and surviving surface evidence. Defences apparently comprised a single ring-ditch with an additional transverse ditch across the spur at the north end. The outer ditch here is 27 m long and may have extended almost to the bottom of the now swampy valley to the west.

The defended area is no longer level but now rises to a regular mound, no doubt the result of the former platform margins having been pushed into the encircling ditch. The occupation platform can be determined as 11-18 x 30 m, giving a defended area of *ca.* 450 m².

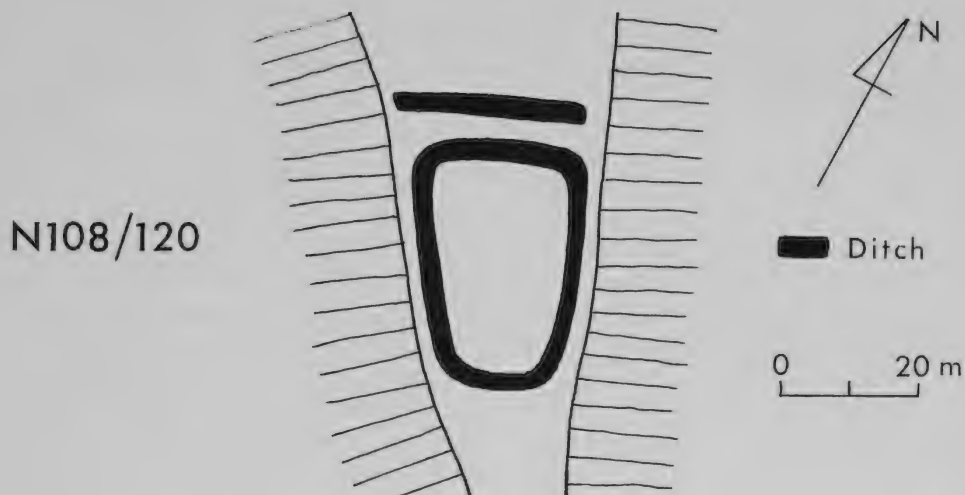


Fig. 17. Reconstruction of defences of N109/120.

Wakamakau N108/178 (483798)

'Wakamakau' is marked on Blocksheets Cape II (14/4) where it is depicted in the stylised form of a rectangular earthwork. It is located on a prominent hill which rises 10 m above the general level of the surrounding terrace country on a narrow ridge between the Hurumangu tributary of Waiaua Stream and the westernmost tributary of Pitone Stream. The site is a commanding one with extensive views all around and useful natural defence on all sides, especially to the east and north. It is impossible now to determine from surface evidence what might have been here. All that survives is the faintest suggestion of a former ditch along the north and west sides of the hill top.

N108/168 (495793) Fig. 18

N108/168 is located at a narrow point in the ridge which divides the two major branches of Pitone Stream. It thus holds a narrow way between the extensive terrace country about the main road to the south and east, and the broad ridge which extends almost 2.5 km north to the fork of the stream. N108/99 is 300 m north across the adjacent gully, and N108/64 is *ca.* 500 m south-west. The site is almost completely destroyed. All the occupation platform, except an area *ca.* 8 x 8 m which supports a large pine, has been cut down by as much as 3 m. The defences of the south side are completely demolished by an access track, already apparent in the 1950 aerial photograph (1790/8). Defences have also suffered greatly elsewhere; only a short section adjacent to the surviving platform remains intact.

At the north and south flanks excellent natural defence is provided by steep falls into adjacent gullies. Both ends of the pa are somewhat vulnerable, however, with easy approaches from the west and from higher ground *ca.* 80 m up the ridge. Archaeological evidence indicates a fortification of typical form with a single ring-ditch, supplemented by an outer transverse ditch at each end. The surviving defensive works of the east end begin with a 1 m high bank, followed by the outer ditch, a 1.5-2 m high bank, the inner ditch,

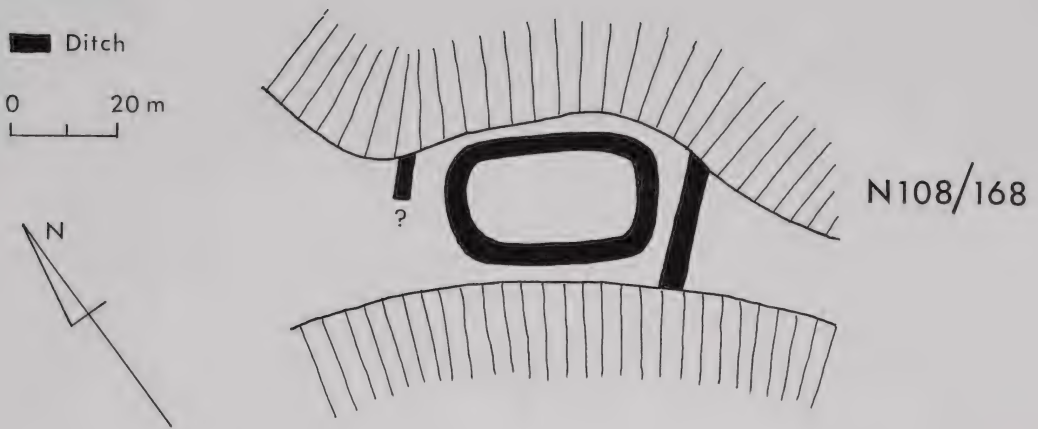


Fig. 18. Reconstruction of defences of N108/168.

and a platform scarp of 4.5 m. On the north side of the site the remains of the ring-ditch indicate an occupation platform perhaps 12-16 x 32 m (ca. 450 m²). Of the living area of the pa nothing more can be said.

N108/99 (495796) Figs. 19, 20

This pa is strongly situated on a prominent hill which stands between two tributary gullies of Pitone Stream almost 3 km from the sea. Nearby to the north and south are N108/169 and N108/168. Mature pine and macrocarpa trees stand in the inner ditch and on the adjacent scarp. The occupation platform is under poor pasture and blackberry. The outer ditch is under pasture. The site is at present in fair condition, although stock are breaking down the platform scarp very badly in places.

N108/99 stands on a somewhat isolated piece of ground between two gullies. It has good command over adjacent gullies and beyond, while to the south a low and narrow ridge connects the site to nearby terrace country. Artificial defences comprise a rare example of double ditch and bank for much of the circumference. The fortification's situation on a knoll, rather than a ridge, has required that the outer bank is more than a simple transverse work and that it extends for much of the way along both sides. Platform scarps are 2-4 m high. At the north end of the platform is an unusually massive bank almost a metre high. An almost equally high but not so massive bank tops the platform rim at the south end. A rim bank also survives in places along the two sides of the platform.

The unusually strong defences of this site make up most of the total area of ca. 2400 m², and enclose a rectangular occupation platform of only ca. 350 m² (15 x 23 m). The occupation platform is level within the rim banks and gives no sign of interior organisation except for five *rua* scattered across the centre. Outside the outer bank at the north end is a single terrace.

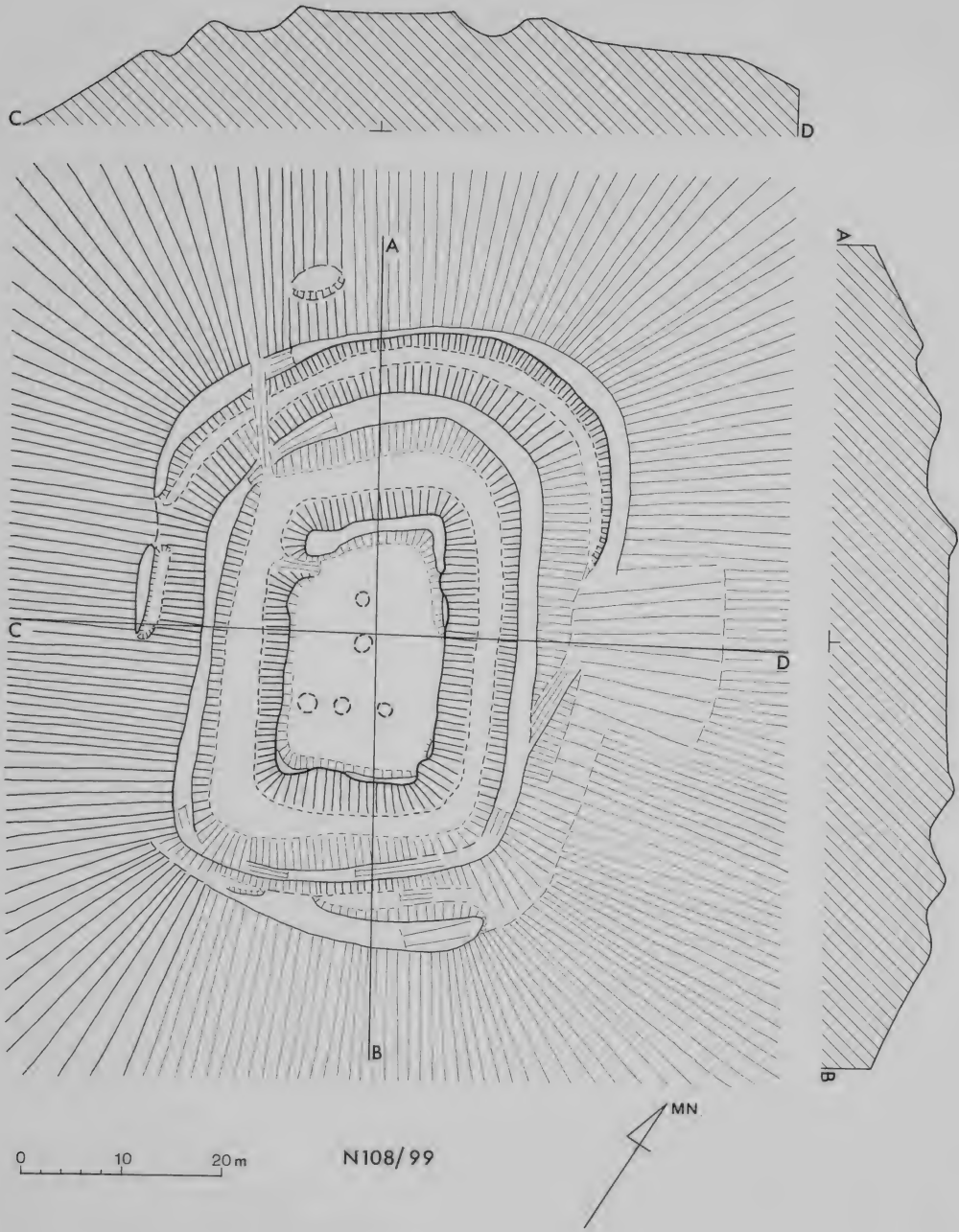


Fig. 19. Plan and sections of N108/99.



Fig. 20. N108/99 — view from the north (1980).

N108/169 (495798) Fig. 21

N108/169 is located on a low spur end on the right bank of the right branch of Pitone Stream, *ca.* 200 m north of N108/99. The site is now under pine and macrocarpa trees. Stock have been 'camping' on the platform and breaking down defensive scarps. Some bulldozer work has damaged the defences of the north-east flank.

Steep falls of 8-10 m into adjacent gullies give useful natural defence at both flanks. Up the spur, however, rising ground commands the platform from only a few metres beyond the counterscarp, while an easy approach from the gully fork offers little security against an approach from that direction. Nor are artificial defences strong, consisting as they do of what appears to have been only a simple ring-ditch work, aided at the south-east (up-spur) end by a 60 cm high bank on top of the platform scarp. The ditch is strong and wide at both ends but is unclear down the flanks with the outer bank having been destroyed to the north-east, and remaining only as a slight rim along part of the other side. Platform scarps are between two and three metres.

The occupation platform is 10 x 21 m, giving an area of no more than 200 m². It dips to the north-west and is divided in two by a 50 cm high scarp. The lower, marginally larger, terrace has further evidence of internal organisation in the shape of a slight scarp dividing off a subsidiary platform *ca.* 5 x 5 m.

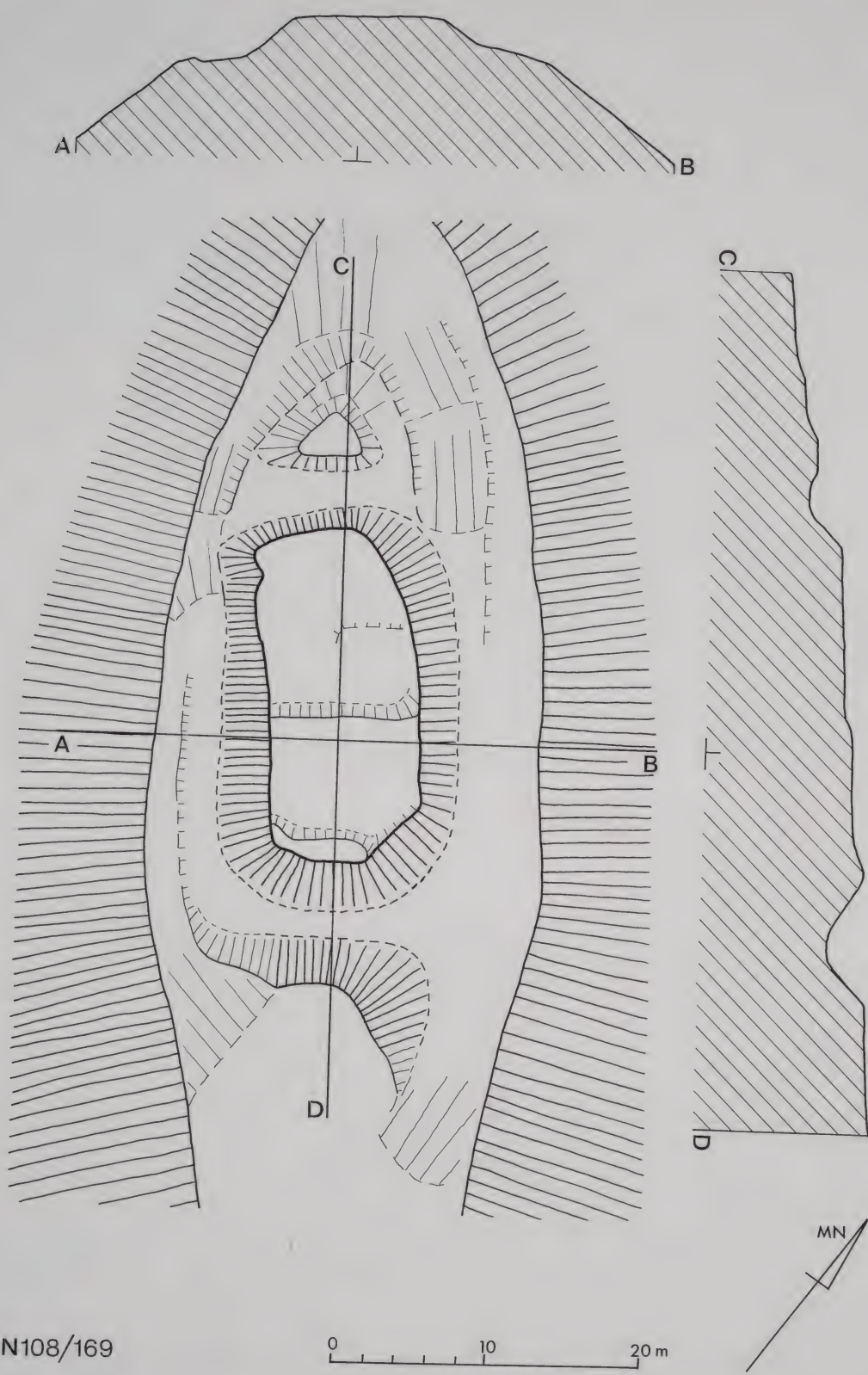


Fig. 21. Plan and sections of N108/169.

N108/170 (497805) Fig. 22

N108/170 is located on a narrow spur just west of Lower Timaru Road near the Greenwood Road corner, *ca.* 2 km from the sea. The spur runs northward between two tributaries of Pitone Stream. In the 1950 aerial photograph (1790/8) the site can barely be seen under gorse; the farm track which runs down the spur below the site on the north-east side is already present. Since 1950 the gorse has been removed and the site is now under pasture. The farm track has done at least some damage to the north-east side. Very severe damage to the site is now being done by cattle: defensive scarps are almost everywhere in a state of active erosion.

Natural defences of this pa are good, with precipitous drops of 6-12 m into gullies on both sides and at the north-west end. Only at the south-east end is there an easy approach from nearby terrace country. The platform commands a useful view over adjacent gullies and terraces. Artificial defence is strong. Three successive ditches and banks bar the vulnerable south-east end, the ditches now 1 m, 1.5 m and 3 m deep respectively. The outer ditch appears to have not quite cut the spur. Lateral defence was probably of ditch and bank form although this is no longer clear. At the north-west end are two transverse ditches and a steep scarp down to the valley below. A massive bank tops the main platform rim at the south-east end.

The unusually narrow site has two occupation platforms. The main, upper, platform is 6.5 x 33 m (*ca.* 210 m²). A 60 cm scarp across the centre divides it in two. On the upper half are four *rua* and two large depressions 30 cm and 40 cm deep. On the lower terrace are two *rua*. A second platform, 7 x 10 m (*ca.* 60 m²) is separated from the main platform by a wide ditch, now 2 m deep. On it is a *rua*, a rectangular depression 4 x 4 m, and the remains of two stone-lined hearths eroding from a damaged scarp. The surviving part of one hearth suggests eight or more river stones were used in its construction. Within a total site area of *ca.* 1700 m² living space on the two platforms is only 270 m².

N108/166 (490813) Fig. 23

N108/166 is situated on a spur which extends from terrace country between the two main branches of Pitone Stream, northward down to the shorter right branch. It is *ca.* 1.2 km from the sea, 2-300 m from N108/165 and N108/167. The site is unclear beneath gorse in the 1950 aerial photograph (1789/4). Since then it has been badly damaged by bulldozer work, mostly down the west side where an unusually wide farm track has been formed. Defences are now under pasture and gorse, with the platform, which is inaccessible to stock, obscured beneath dense bracken, some blackberry and gorse. A few karaka, mahoe and mamaku survive on the platform rim and scarp.

The platform commands a useful view over adjacent gullies and terraces. Natural defences are mostly dependent on steep 10-15 m slopes into gullies east and west. The approach up the spur from the north is not difficult, while the defences at the vulnerable south end cut the site from an extensive level area immediately beyond, which is no lower than the site itself. Artificial defence is made up of an inner ring-ditch with additional transverse ditches cutting the spur at both ends. The 1950 aerial photograph suggests that at the south end the lateral ditches extended unusually into both transverse ditches. The platform scarp is *ca.* 3 m high all around. A bank more than 1 m in height tops the platform rim at the south end and extends at least part way down the west side.

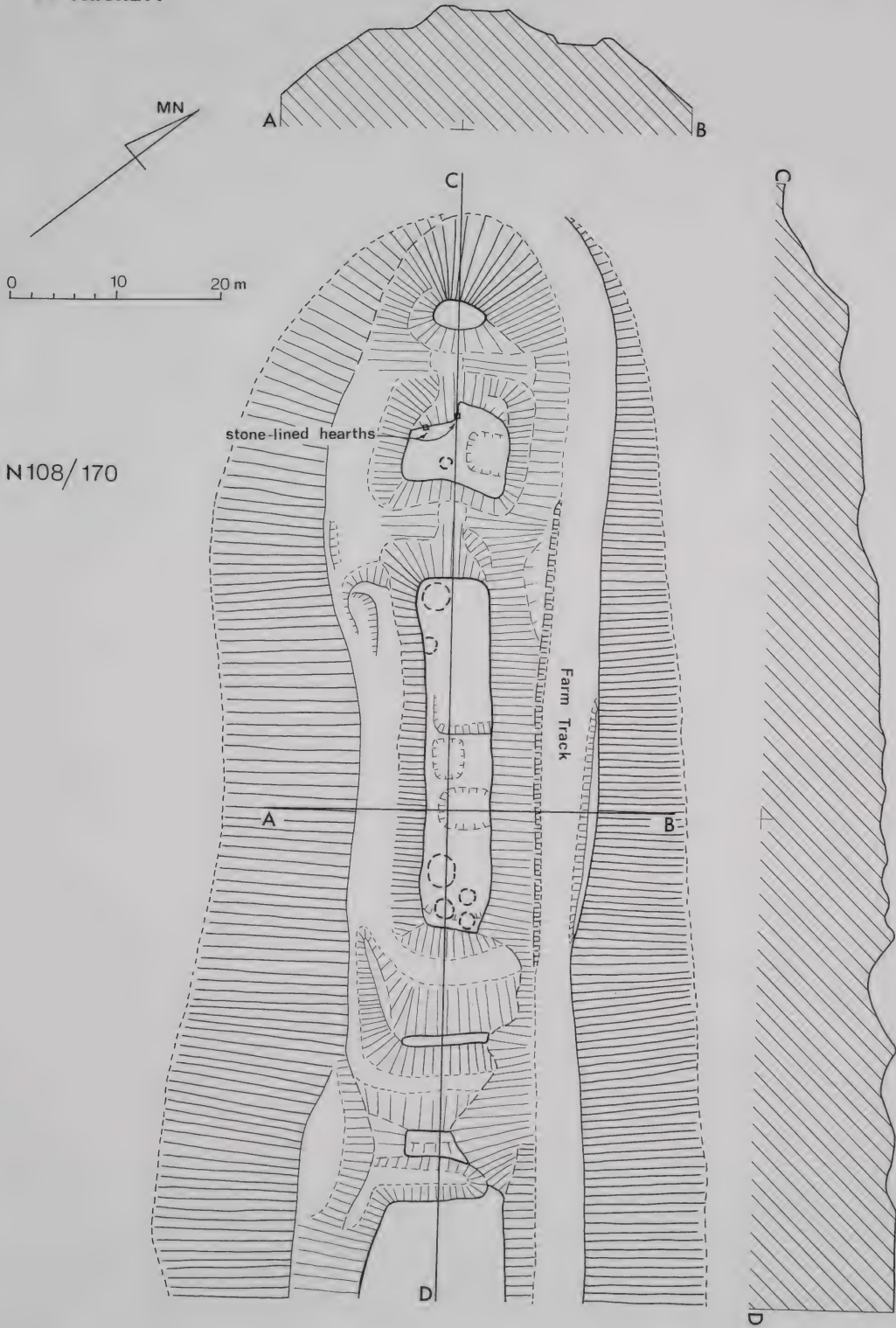


Fig. 22. Plan and sections of N108/170.

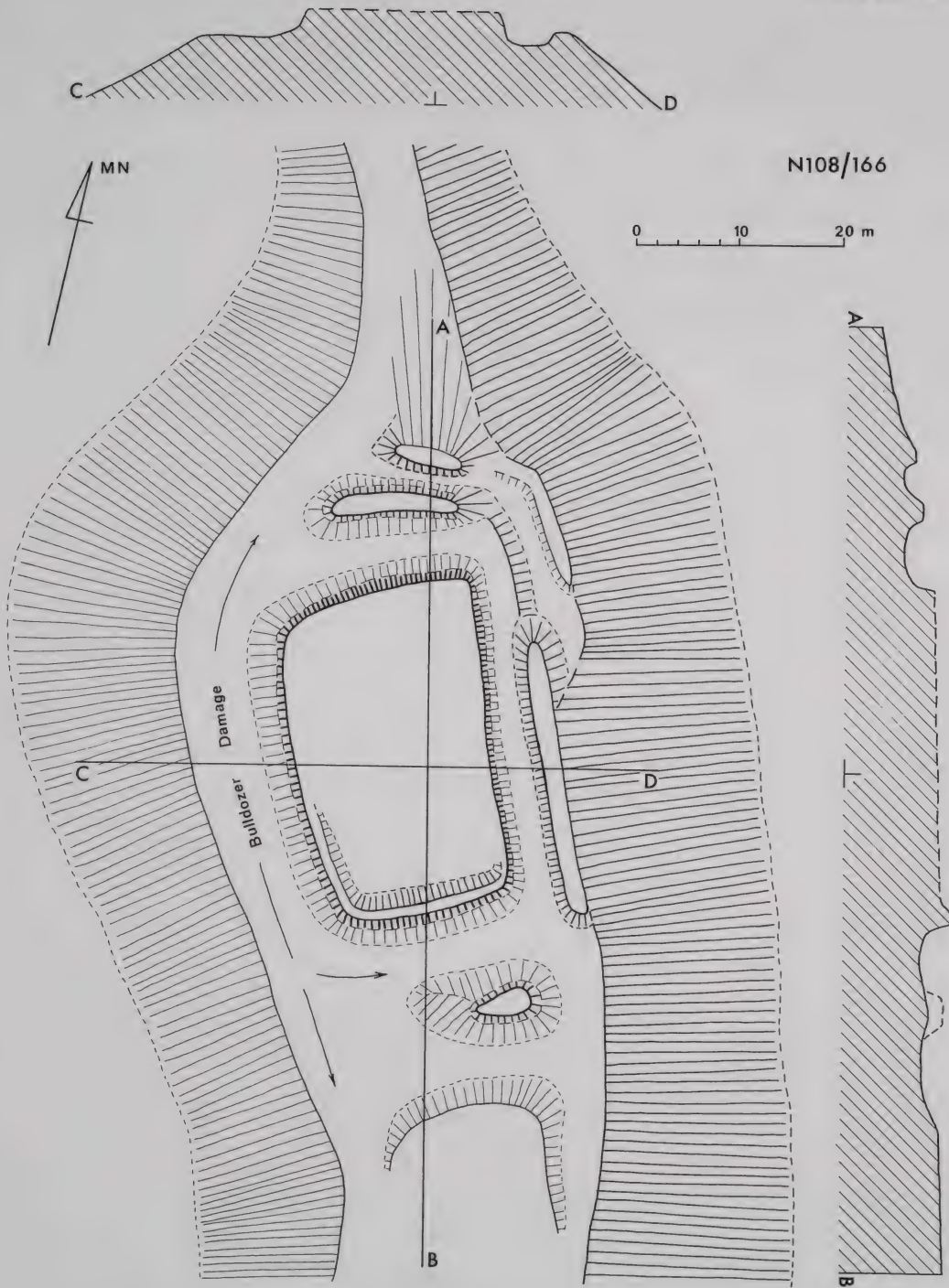


Fig. 23. Plan and sections of N108/166.

The four-sided occupation platform is 16-19 x 30 m (*ca.* 500 m²). Some *rua* are present but dense cover makes detailed mapping of this area quite impossible.

N108/167 (491817) Fig. 24

This small fortification is situated on the terrace edge above the right bank of a northerly tributary of Pitone Stream, off Greenwood Road, 1 km from the sea. The earthwork has a very indistinct outline, now under pasture and some gorse.

N108/167 occupies a slight knoll which gives a useful view over the terrace north and east. South and west is a steep 20 m scarp into the adjacent gully. Artificial defence consists of a single shallow ditch and bank which extends around the north-east side of the knoll, and a slight terrace, 4 m below the platform, which runs around the rear above the gully.

The occupation platform is *ca.* 9-12 x 18 m in size, giving an area of *ca.* 170 m². A possible *rua* survives on a slight terrace outside the ditch at the west end of the site.

N108/165 (486818) Fig. 25

This curious earthwork is situated on a prominent hill which stands at the terrace edge above the left bank of Pitone Stream *ca.* 600 m from the beach. It commands an excellent view all around. The site is now under grass, but does not appear to have suffered from cultivation.

East and south of this fortification is the steep-sided gully of Pitone Stream. West and north is terrace country some 8-10 m below the occupation platform of the site. Artificial defence consists of a single ditch which runs at a low level around the knoll on the north and west sides, and extends part-way down the steep south side. This ditch survives only as a terrace for much of its length. To the east and south-east defence is left to the precipitous natural scarp. Inside the ditch a moderate slope of 3-4 m height rises to the rim of the occupation platform.

Most of the approximately 800 m² area within the ditch is unmodified slope below the occupation platform. The platform itself is as much as 14 x 26 m, giving an area of *ca.* 330 m². There is also a small terrace outside the defences at the west end. The main platform is backed on the south side by a substantial bank almost 1 m high. Extending north from this bank are four lower banks which divide most of the platform into rectangular depressions of roughly equal size. It seems likely that the bank on the south side is protection from the weather, while the lower arms extending at right angles mark the walls of adjacent dwellings or other structures backed up against the south wall.

N108/106 (484824) Fig. 26

N108/106 is situated on a spur above the beach on the north bank of Pitone Stream. The site is now cut by the road linking the seaward ends of Pitone and Greenwood Roads which runs in a 2.5 m deep cutting through the centre of the work. The present farm race which runs along the south-east flank of the site makes use of former defences here, which are visible in the 1950 aerial photograph (1789/4). Elsewhere the site is under pasture and boxthorn hedge.

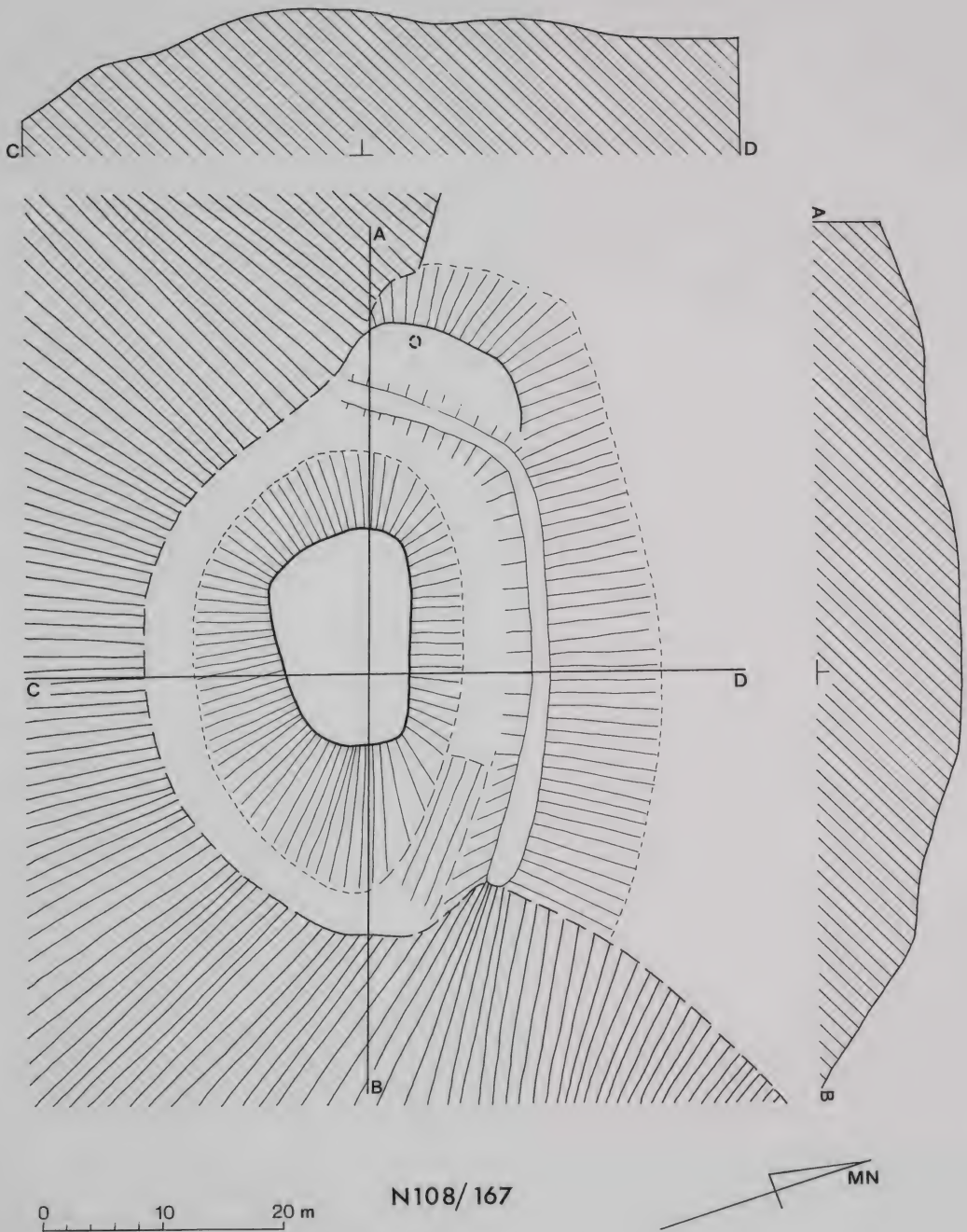


Fig. 24. Plan and sections of N108/167.

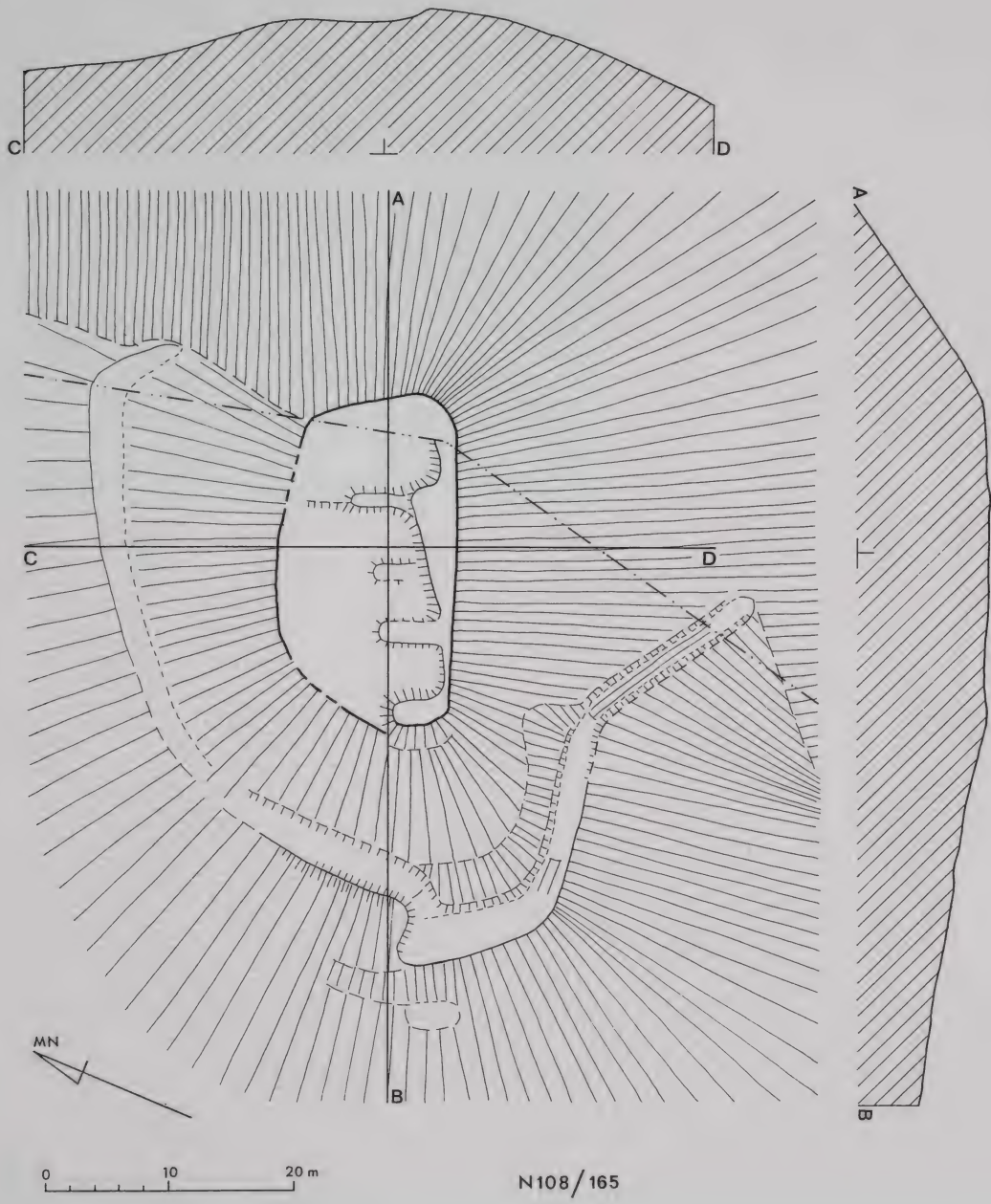


Fig. 25. Plan and sections of N108/165.

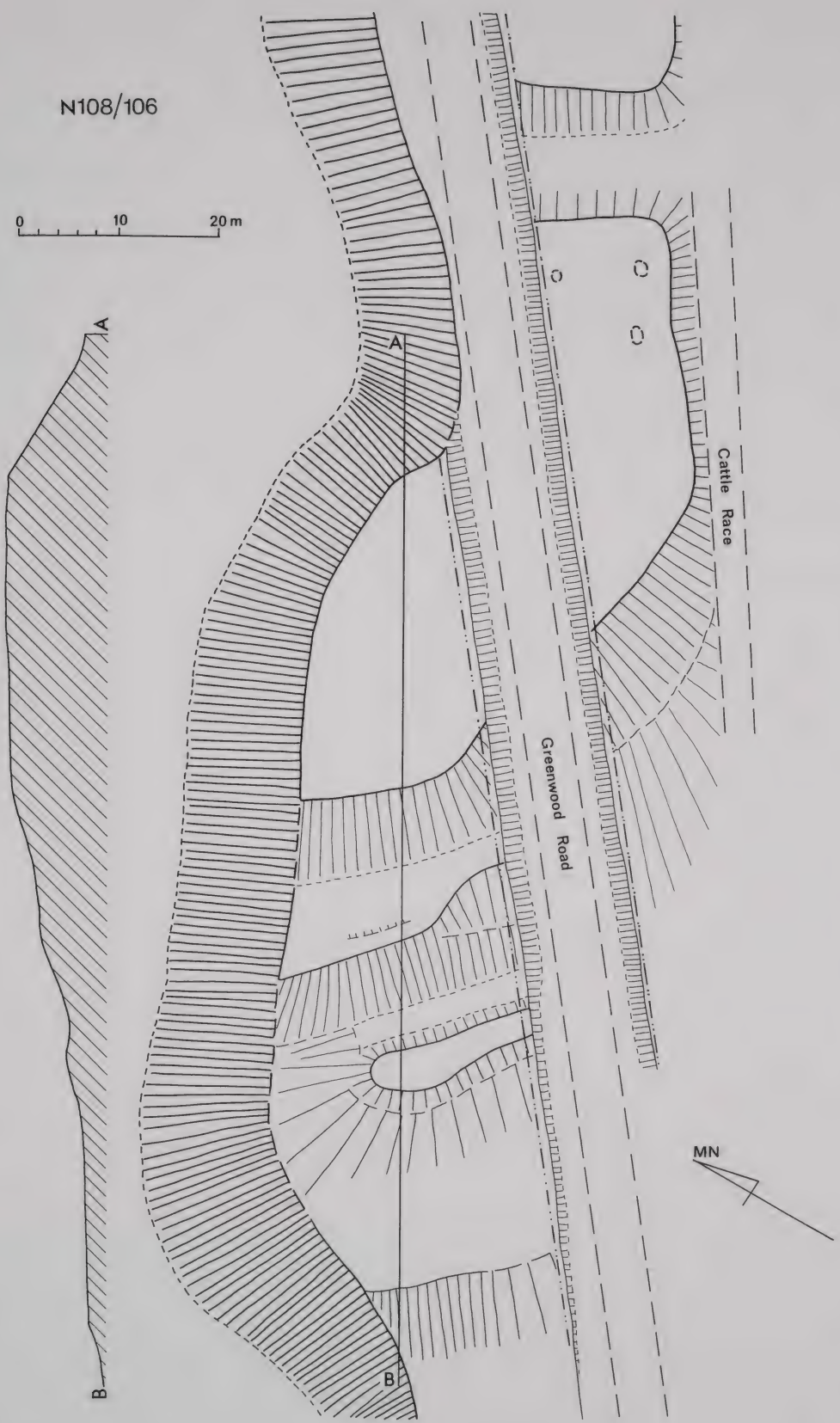


Fig. 26. Plan and section of N108/106.

The fortification takes up the western extremity of a major area of terrace country which extends as far east as the valley of Timaru River and as far south as the Upper Timaru Road across the river from Manawapo. The north is defended by a 15 m cliff to the rear of a 30-40 m wide area of low dunes behind the beach. To the south is a steep slope into the adjacent gully. Access is easy up the spur from the beach, while to the east the level terrace provides no natural obstacle. Artificial defence consists of a ditch and bank which extends from cliff to cliff around three sides of the site. An additional ditch cuts the lower spur to the west, with possible further terrace and scarp defence a further 20 m down the spur.

The level occupation platform is as much as 75 m long and averages 20 m in width, giving an area of *ca.* 1200 m². The broad ditch and terrace of the lower (west) end may also have provided defended living space. Three *rua* have survived at the east end of the platform.

Tataraimaka N108/100 (478823) Fig. 27

Listed by Skinner (1946:64) as one of the three major fortifications of the Tataraimaka district, the pa from which the district takes its name is located on a coastal headland 200 m east of the Katikara River mouth. The site is within an historic reserve administered by the Lands and Survey Department. Construction of Pitone Road and of the road cutting which leads to the beach south of the pa may both have involved damage to outer defences. Damage has also been done to successive terrace and scarp defences at the west side of the fortification by a path which runs to the topmost platform. Canopy vegetation is predominantly pohutukawa with some macrocarpa and karaka. Taupata and flax cling to the exposed seacliff. Recent felling of large macrocarpa trees, which formerly dominated the lower terraces, has resulted in a dense growth of poroporo, kawakawa and inkweed.

Natural defences of Tataraimaka consist of a 40 m cliff around the north and west sides, to the boulder beach and low-lying ground behind, and a steep slope to the low isthmus which cuts the pa from the extensive terrace country inland. Artificial defences are made up chiefly of a series of scarps, as much as 6-8 m high, which cut the promontory from one side to the other. The topmost of these scarps is supplemented by a ditch as is the massive bottom scarp. It seems likely the surviving ditch now adjacent to Pitone Road is the major outer defence, although what has been destroyed here by the road is somewhat problematical. Some defensive banks occur at terrace edges throughout the site. In at least two places large beach boulders have been used torevet short sections of scarp.

Tataraimaka is roughly triangular in shape with surviving defences along the broad landward side approximately 100 m long and the depth of the fortification from here to the seaward margin of the topmost terrace between 60 and 80 m. The total area of the site is *ca.* 3500 m². Living space, however, takes up only a small part of this. The topmost platform is *ca.* 10-16 x 18 m (*ca.* 200 m²). A single *rua* is dug into the rear of a shelf at the seaward side. Below the platform two small terraces are cut into the steep seaward faces north and west. The next major living terrace is *ca.* 16 x 42 m in maximum dimensions (*ca.* 500 m²). The upper part of this terrace dips to the south-east. Two depressions indicate houses. The third major living platform extends for 75 m across the full width of the site. It varies between 6 and 10 m in width and might be 600 m² in area, this including an extension on the steep scarp at the western flank of the site. Two *rua* survive at the

western end of this terrace. The three major living platforms thus total 1300 m² in area. Other minor terraces and platforms at lower levels may also have been used in part to provide accommodation.

Tataraimaka was taken by a northern *taua* (war party) which included Nga Puhi, Ngati Whatua, Ngati Toa, Ngati Tama and some Te Atiawa shortly before 1820 (Smith 1910:285-287). It is said that two muskets among the northern party were the first seen in Taranaki. The attackers used the guns to pick off defending chiefs before the pa was stormed. In April 1863 St George's Redoubt was thrown up by the 57th Regiment on the

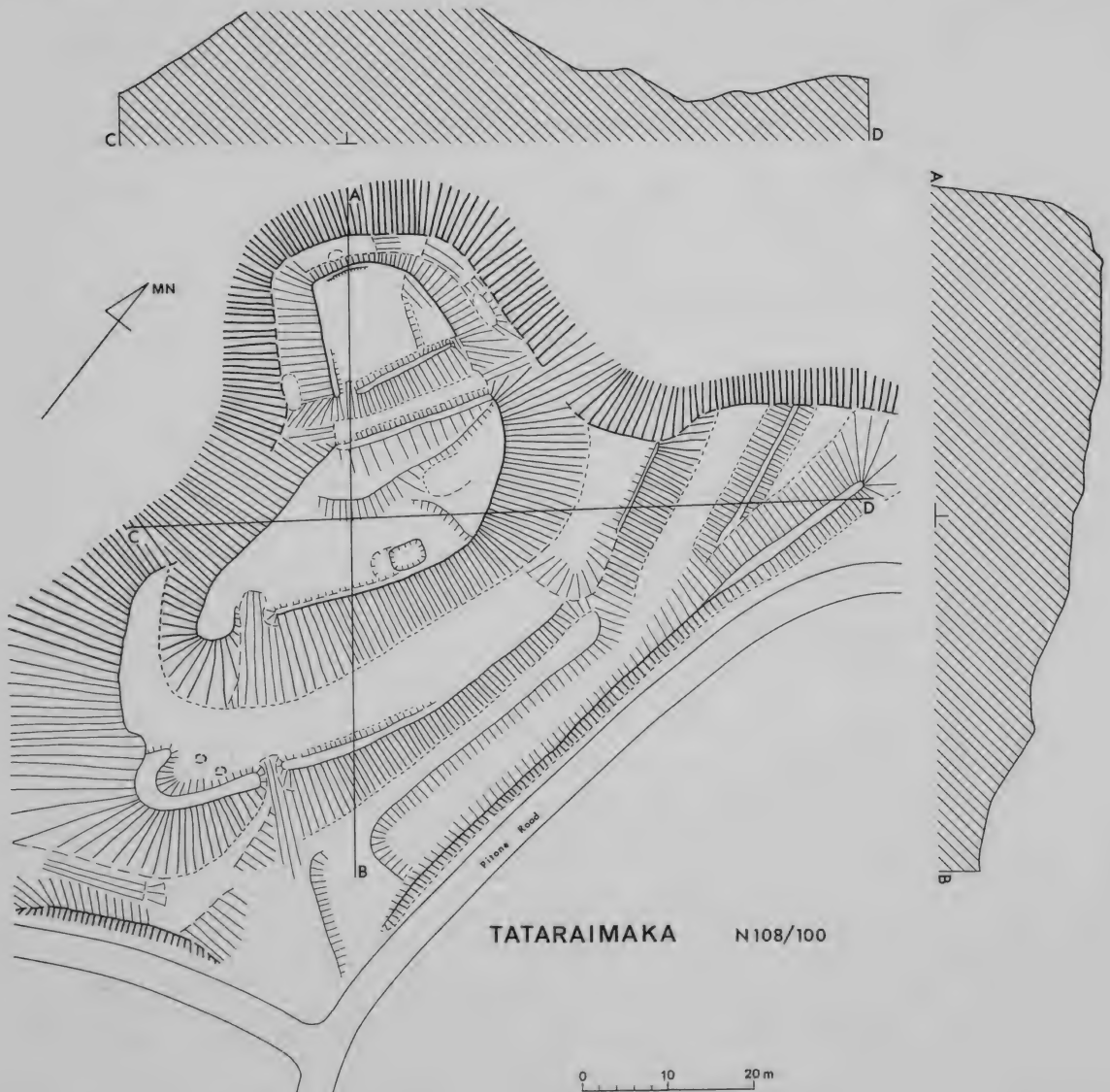


Fig. 27. Plan and sections of Tataraimaka (N108/100).

terrace edge immediately south. The top platform of the older fortification was then modified to accommodate a signal station. An earth bank was raised and it is likely, too, that the ditch outside also dates from this period. The path through the fortification in all likelihood dates from this occupation, and lower terraces may also have been modified for defence and perhaps accommodation. The soldiers called the pa 'the crow's nest'.

Pukeporoporo N108/90 (487778) Figs. 28, 29

Pukeporoporo is the third of Skinner's three major pa of the Tataraimaka district (Skinner 1946:64). The site is located above the right bank of Katikara River *ca.* 4 km from the sea, 300 m seaward of the main road. It is mostly in excellent order, although stock are causing active erosion to the steep scarp — and extensive deposits of shell midden — above the river. The preparation of farm access tracks has caused some damage to lower levels on the north-east side. The site is now under pasture with remnant native bush in the gully to the north and at the bottom of the Katikara River valley to the west.

This pa occupies a high point on an isolated, 400 m long, ridge within the Katikara River valley. It is connected to the terrace country eastwards by a natural causeway which crosses the adjacent low-lying ground at the head of a small gully. Because of the very dissected countryside about Pukeporoporo on both sides of the river, even higher levels of the site give little command over nearby ground. The pa has good natural defences on all sides. To the west is a precipitous slope which falls directly to the Katikara River 45 m below the highest point of the site. On the other side of the ridge is a gully which drains to the north and a flat-bottomed depression 50 m across which lacks natural drainage. At both ends of the ridge, especially at the south end, is a steep rise from the valley bottom.

Pukeporoporo is a very complex site occupying a total length of the ridge of almost 350 m. At the high point in the ridge is a defended position of considerable strength. Extending a further 240 m to the north-west is an extensive area of terraces, platforms, scarps and *rua* which make up a unique instance in the survey area of a significant undefended occupation area outside a pa having survived the past 100 years of European agriculture virtually intact. Several transverse scarps in this area offer potential for defence. The total area taken up by this undefended living area may be estimated at 6000 m².

The fortified position, or citadel, of Pukeporoporo occupies an area of *ca.* 40 x 100 m at the south-east end of the ridge. Surface evidence is now difficult but it is likely the form of defence was basically that of a discontinuous ring-ditch almost completely enclosing the hill-top. This ditch is very clear at the north-west end but less so at the south-east end and the sides where it now has the form of a terrace. A steep defensive scarp runs right around the fortification outside the bank or terrace edge. At the south-east end a short terrace (probably originally a ditch) cuts the spur at the top of its steep rise from the nearby gully. At the north-west end three terraces and scarps outside the outer bank offer some potential here for additional defence. On the narrow causeway to the north-east, recently prepared farm access has cut the end of a ditch which survives in part on one side of the causeway — and which can just be made out in the 1950 aerial photograph (1790/6).

The defended area of Pukeporoporo citadel is difficult to establish because of the indistinct remaining earthworks. An area of *ca.* 2000 m² may, however, be a reasonable estimate. Within this defended area the blurred remains of terraces, which in general dip to the south-east, offer none of the clear-cut surface features present on other sites. Indeed

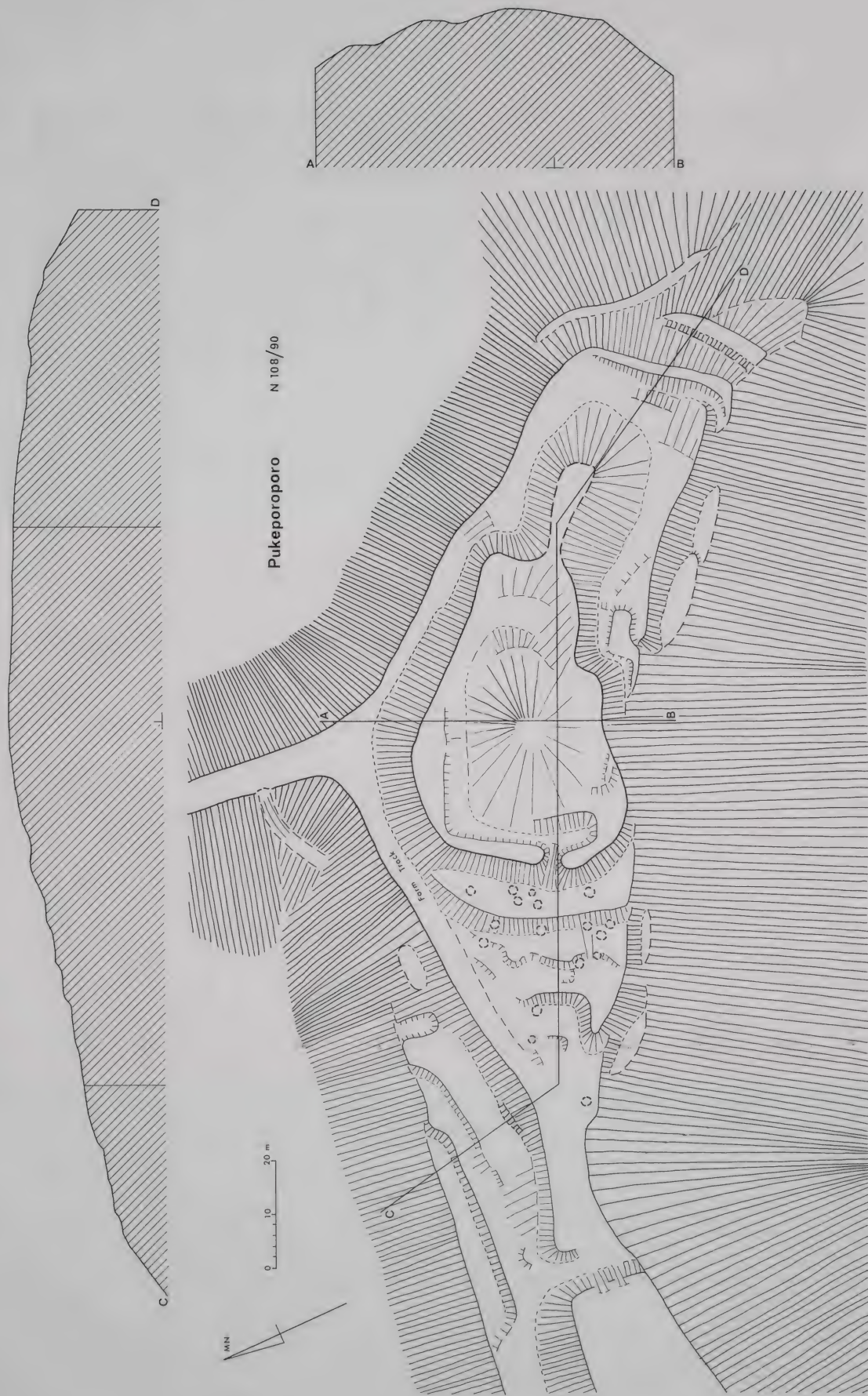


Fig. 28. Plan and sections of Pukeporoporo (N108/90).



Fig. 29. Pukeporoporo — aerial view from the north-east (1975).

the highly enigmatic area within the hill-top defences may be contrasted with occupation areas immediately outside which have surface features of typical form. Two terraces survive on the steep hill slope to Katikara River. Outside the north-west end of the citadel is a series of terraces which are occupied by a total of 17 *rua*. Below these are some massive living terraces above the gully to the north.

N108/179 (485783) Fig. 30

Approximately 200 m west of Lower Pitone Road, N108/179 is south-west of Pukewaranga and north-west of Pukeporoporo, close to the right bank of the Katikara River. It is situated inconspicuously on a small spur 5-10 m lower than the general level of the surrounding terrace country. To the east it is overlooked from the terrace rim, 40 m away; it does, however, overlook a wide area of more distant country across the Katikara River to the south and west. N108/179 is now under pasture with remnant native bush, predominantly karaka and kawakawa, in gullies on three sides. In the 1950 aerial photograph (1790/6) the earthworks are obscured by an irregular plantation of macrocarpa and pine trees. These trees have since been removed resulting in the almost complete destruction of the site.

The pa is bounded north and south by small and steeply rising gullies which curve sharply to meet in front of the site before running out to the Katikara River. Useful natural defence is provided on three sides by precipitous 15-20 m slopes into these adjacent gullies. At the remaining end a transverse ditch cuts the spur at a comparatively low and



Fig. 30. Reconstruction of defences of N108/179.

narrow point. Outside the ditch the ground rises steadily to the terrace rim some 35-40 m away, from which defences and occupation area are completely overlooked. Damage done to this pa makes interpretation of the defences far from easy. The 15 m long transverse ditch is clear from a surviving 4.5 m length which indicates both massive ditch and high bank on the inner rim. The counter-scarp is 1.8 m high, the ditch 5 m across, and the main scarp 2.5 m to the top of the inner bank. A causeway across the surviving north end of the ditch appears to be an original feature. Behind the transverse ditch there appears to have been a ring-ditch enclosing the occupation platform. This is indicated by a remaining rim of the outer bank along the west end of the site (which also makes a difficult appearance along the south side), and by slumped ground suggestive of fill which lies within the natural margin above the gullies.

Material for filling the encircling ditch has been taken from the former occupation platform, which is now a featureless mound. The size of the destroyed platform can be roughly determined from the margin of fill which in places has slumped into the former ring-ditch. A platform *ca.* 12-18 x 18 m is indicated, providing living space of approximately 270 m².

Puketotara N108/176 (479786) Fig. 31

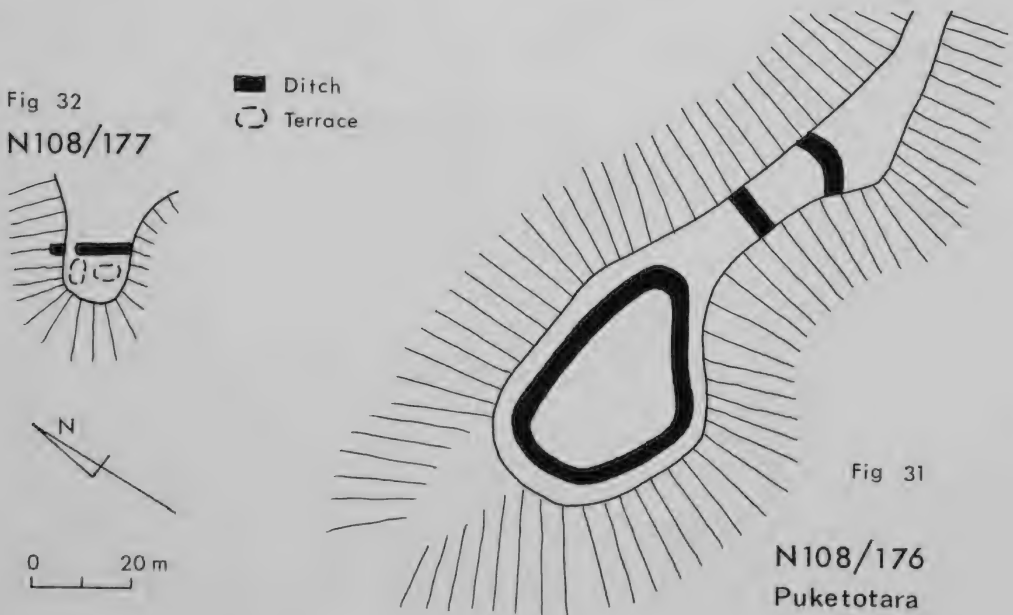
Puketotara is situated on the right bank of Katikara River *ca.* 3 km from the sea. It occupies the broad and dominating end of a spur which extends west and then north-west from the terrace country of Lower Pitone Road. The site commands a wide view of the Katikara River valley, west across the river, and east up rising ground to Pukewaranga. Only to the north does the rim of higher ground 100 m away allow command of no more than the adjacent gully. Pukewaranga and Pukeporoporo are both visible from Puketotara, with the first named dominating the easiest approach down the spur from the south-east. The site itself is now under pasture with remnant native bush including karaka, mapou, kohekohe, kawakawa, mahoe, mamaku and titoki surviving in gullies north and south and in the valley of the Katikara River to the west. In the 1950 aerial photograph (1790/6) the earthworks are invisible under bush. About 1965 the bush was cleared off the pa and the earthworks almost completely destroyed during accompanying bulldozer work.

Natural defences of Puketotara are provided to the west by a steep 40 m slope to Katikara River, to the north and south by precipitous 10-12 m drops into adjacent gullies, and the east by a low and narrow spur. Higher ground is *ca.* 200 m from the defended area along the spur. Remaining archaeological evidence, along with information from the present land-owner, indicates that the pa was defended by an encircling ditch and bank which enclosed an area perhaps less than half that available above the precipitous slopes into adjacent gullies. At the south-east end of the site the approach down the spur is barred by a massive ditch, still largely intact, which is perhaps 40 m from the former platform rim. A second transverse ditch behind this is now destroyed. Thus the pa was probably defended by an encircling ditch and bank with two transverse ditches at the vulnerable up-spur end. There is some difficult archaeological evidence for two more possible transverse ditches, *ca.* 50 m forward of the surviving ditch, at a point where the spur drops slightly before continuing to the dominating terrace country nearby.

Little can be said concerning the occupation platform of this pa. It could have been of a roughly five-sided plan with greatest width perhaps 24 m and greatest length of not more than 40 m. A defended area of 700-800 m² is indicated. Some of the shallow pits may indicate collapsed *rua*.

N108/177 (481786) Fig. 32

Two hundred metres east of Puketotara a ditch cuts off a tiny blunt spur from rising terrace country beyond. The work is overlooked from higher ground 80-120 m north and east, but does overlook the spur to the west which leads down to Puketotara. The site is now under pasture with some damage to the south side resulting from recent quarrying for soil.



Figs. 31, 32. Reconstruction of pa defences. 31. Puketotara (N108/176).
32. N108/177.

Natural defences of N108/177 are poor. To the north is a steep 15 m drop into a gully, while to the south is a steeply rising tributary gully which is only 4 m deep adjacent to the site. From the fork of these two gullies is a steep slope up to the defended area. Across the ditch the ground rises steadily to the terrace edge. Artificial defence consists only of a 10 m length of ditch which cuts the spur. The ditch is in unusually good condition, 1 m across at the base, with a counterscarp *ca.* 2 m high and a main scarp to a massive but badly formed bank on the platform rim *ca.* 3 m above the ditch floor. A slight causeway at the north end of the ditch indicates access into the defended area. Beyond this a shallow extension to the ditch of 3-4 m quickly disappears down a steep slope into the gully.

The causeway across the ditch runs on to an ill-formed terrace. This terrace begins next to the defensive bank and extends *ca.* 8 m along the northern margin of the defended area next to the rim above the gully to the north. Another difficult terrace is located immediately behind the defensive bank. With the exception of these terraces the defended area slopes away without apparent modification before sharply dropping away to the gully fork from some 10 m behind the rim of the defensive bank. The defended area can be little more than 80 m². The site should probably be viewed in conjunction with Puketotara: it commands the easiest approach to the larger pa and can hardly have been defended on its own.

Poubeau N108/27 (472801) Figs. 33, 34

Poubeau is situated on the right bank of the Katikara River 1.7 km from the sea. It is low on an undistinguished spur which extends north-west between the river and a small neighbouring gully. Poubeau is one of the largest, and the furthest upstream, of a group of eight fortifications which extend along both banks of the Katikara River upwards of 1 km from the sea. Also on the right bank are N108/102, 103, 161 and 162, while across the river are N108/101, 104 and 160. Together these sites make up the most concentrated group of pa examined in the present programme. Poubeau can be seen in the 1950 aerial photograph (1790/6) under gorse and pasture. It is now under pasture with gorse and remnant native bush including karaka, mahoe and kawakawa surviving on the adjacent cliff to the river. Considerable damage has been done to the site since 1950: down the northern side where the ditch and bank forms the basis of the present farm track, and through the centre where successive ditch and bank defences have been cut to provide a second route down the spur.

Poubeau is well protected on the south-west side by a 15-20 m cliff to the Katikara River. On the opposite side is a steep slope of 8-10 m into a narrow and swampy gully. At the south-east end of the site a very slight dip offers no natural advantage over an advance down the spur. The pa is dominated both from higher up the spur and from the higher ridge to the north-east only 60-80 m distant (on which N108/102 and 103 are situated). The lower end slopes away to an extensive river flat, *ca.* 60 m from the defences and 10 m below. Artificial defence is chiefly made up of a single ditch and bank which extends around the site except where the cliff of the south-west side intervenes. Two further transverse ditches cut the occupied area into three sections. These interior ditches are quite as large as the chief transverse ditches at the ends of the site, and like them are supplemented by massive banks on the platform rims. The nature and scale of the interior defences makes Poubeau an unusual site for the region.

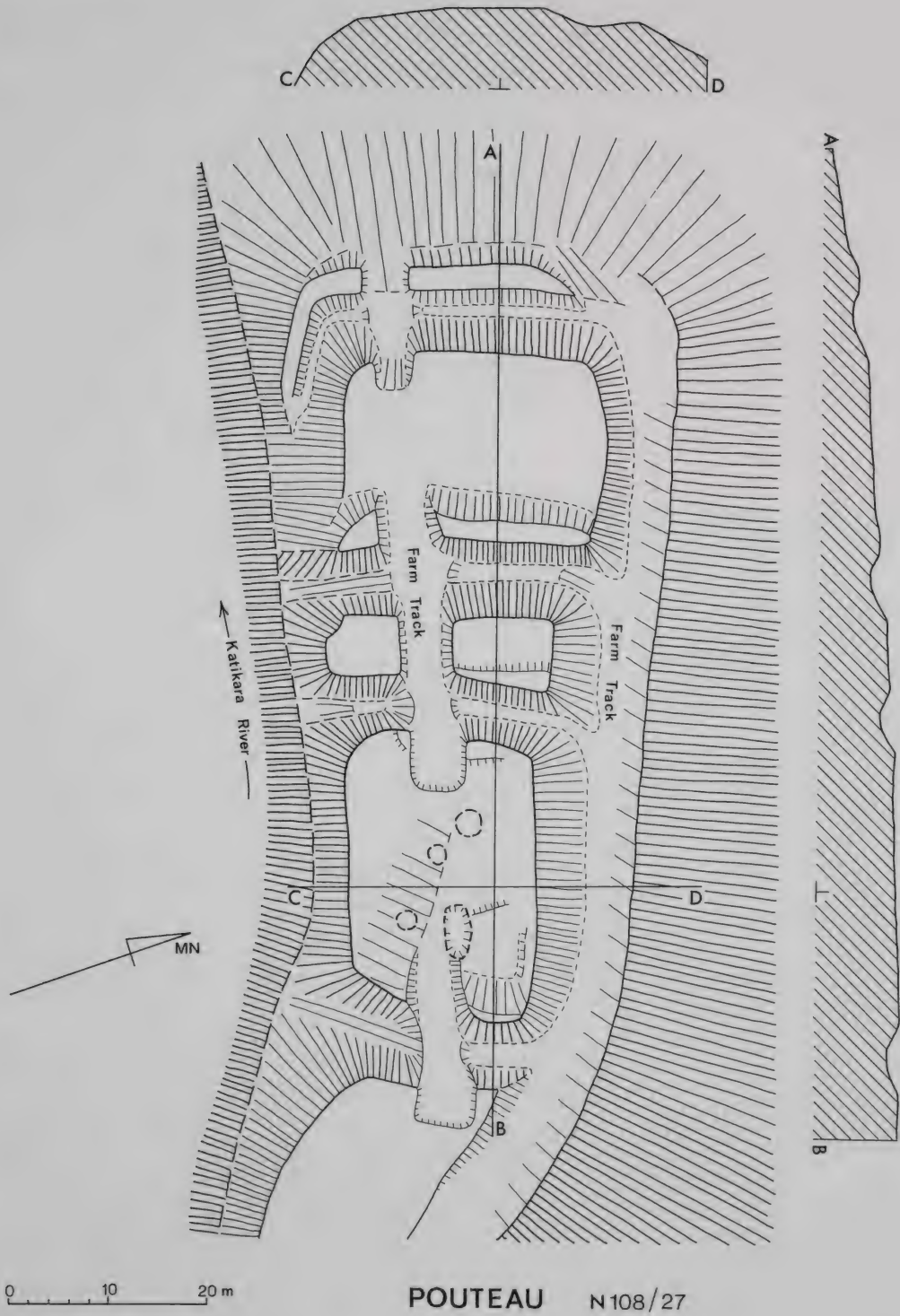


Fig. 33. Plan and sections of Pouteau (N108/27).

The total area defended by the external defences of Pouteau is 18-26 x 66 m, *ca.* 1400 m². If the interior defences are excluded, however, the three occupation platforms are *ca.* 460 m², 140 m² and 425 m² respectively, giving a total defended area of 1025 m² available for occupation. Only the uppermost platform contains evidence for internal organisation: some slight scarps suggest preparation for houses or similar structures, while two or three *rua* are indicated by the characteristic circular dimples. A large and deep pit may represent two adjacent *rua* which have had their roofs collapse.

N108/102 (472805) Figs. 34, 35

N108/102 is located on a long spur which extends north from the terrace country of Lower Pitone Road to the right bank of Katikara River. It is situated at the point where the spur narrows to 30-40 m width, and is 120 m south of N108/103 which stands above the river. The present landowner reports that when the area between the two fortifications was first ploughed by his father the horses kept dropping into holes: these were clearly *rua*, and indicate that this intervening area provided occupation space additional to the defended areas of the two pa. The defences of N108/102 are now under pasture, with the platform and its scarps under scattered native trees including karaka, mahoe and wharangi. Some damage has been done in the past by the preparation of farm access down the spur which makes use of the ditch and bank of the east side of the site, and cuts the transverse defences of both ends. Severe damage is now being done by stock 'camping' under the trees on the top platform and breaking down the scarps, especially of the east and north sides.



Fig. 34. Pouteau (upper right) and N108/102 — aerial view from the north-west (1975). N108/103 is in the shadow front left.

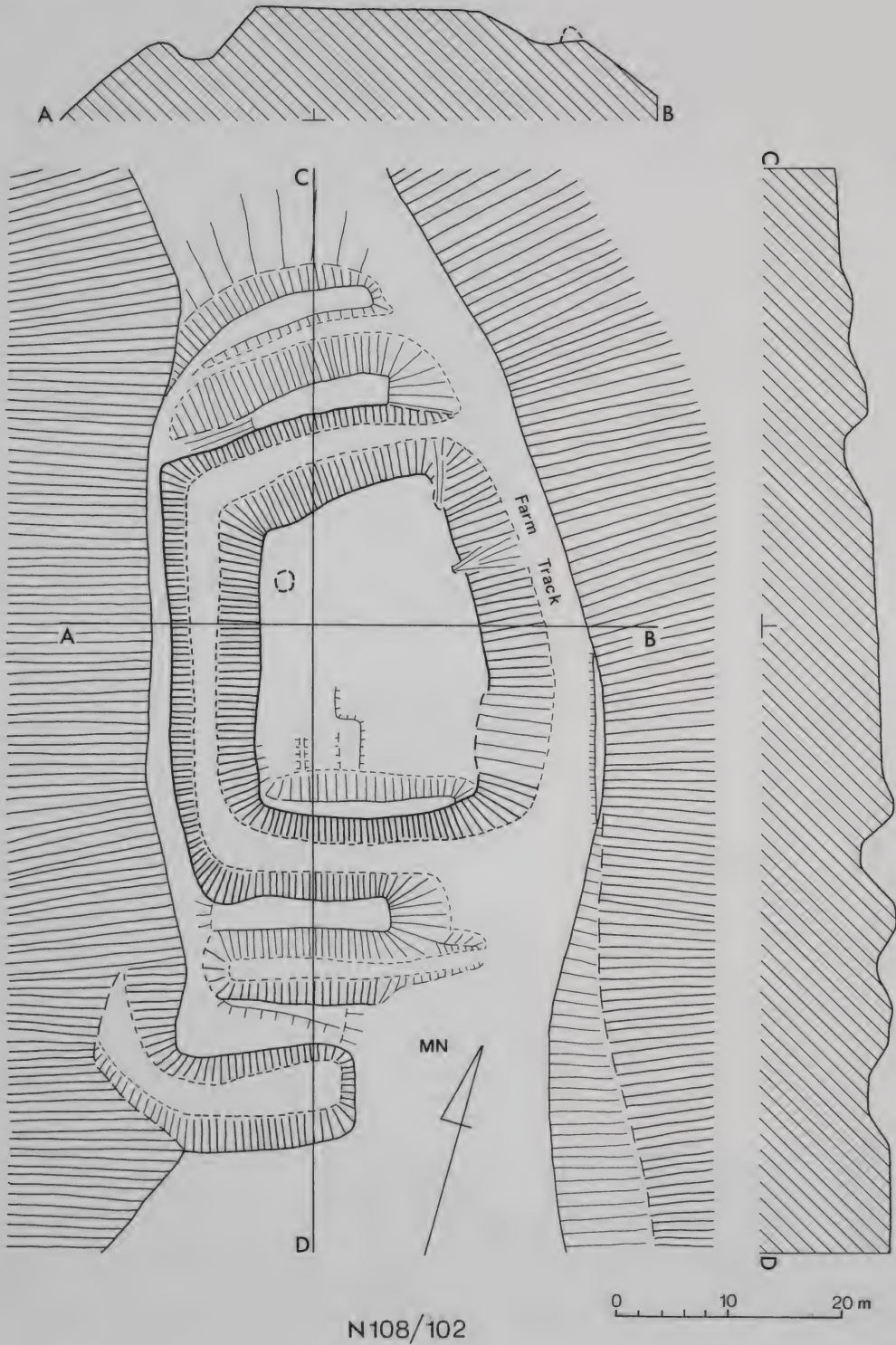


Fig. 35. Plan and sections of N108/102.

The fortification has good natural defence at both sides with precipitous 12-15 m slopes into a steep gully to the east and to a broad river bank flat to the west. To the north the spur falls away 6-8 m to N108/103, while up the spur to the south the site possesses a 1-2 m height advantage over perhaps 50 m before higher ground is reached. Artificial defences consist of a ring-ditch, with two additional transverse ditches at the more vulnerable south end and one more at the north end. At the south end the two outer ditches do not appear to have cut the spur, although present surface evidence may mislead on this following modification for farm access. The platform scarp is 2-4 m in height. Elsewhere defensive scarps and counterscarps are 1-3 m. A bank at the up-spur (south) end of the platform rim stands 1 m above the interior.

The roughly four-sided occupation platform has an area of *ca.* 500 m². Slight terraces and banks at the higher, southern, end show some preparation of living platforms. One *rua* is suggested by a dimple near the north-west angle.

N108/103 (472806) Fig. 36

This small pa is located on the right bank of the Katikara River 1.2 km from the sea. It is 120 m north and on the same spur as N108/102, and is immediately over the river from N108/104, a fortification very similar in scale and design. N108/103 is close to the northern end of a long spur which runs off the terrace country of Lower Pitone Road. From its south-east side the defences fall away into a gully which extends south-east almost as far as the road. The site shows up well under light scrub in the 1950 aerial photograph (1790/6). It is now under mature pine trees with some pasture at the south end. Large pine trees have badly broken up and obscured features on the occupation platform, while the scarps are suffering from severe stock damage in places.

Natural defences consist of a precipitous 20 m scarp to the Katikara River on the north-east side and a similarly steep drop of *ca.* 15 m into the adjacent gully to the south-east. The south presents an easy approach down the spur from N108/102, although, of course, if the neighbouring site was occupied at the same time, clearly this quarter would be well protected. To the south-west the terrace edge 20 m from the defences obscures any approach from this direction, although, again, lower ground beyond the rim is well covered from the neighbouring pa. N108/103 has good command to the north-west over the low bend of the river — ground which in this case is obscured from N108/102. With indications that the intervening ground was occupied by settlement, a good argument can be made that these two fortifications provided complementary defence from positions which between them commanded nearby ground in all directions. Artificial defence of N108/103 consists of a single encircling ditch with platform scarps as much as 3.5 m high. There is a slight bank on the platform rim at the south-east and south-west margins.

The occupation platform is 10-15 x 16 m, or *ca.* 200 m². Three depressions include two which are rectangular and suggestive of houses. Surface evidence indicates two *rua*.

N108/161 (474807) Fig. 37

N108/161 is located on the right bank of the Katikara River 1 km from the sea. It is situated on a spur which drops away to the north between the river and a short gully which rises rapidly to the terrace country of Lower Pitone Road. Across this gully is the neighbouring fortification, N108/162. N108/161 is now under grass and scattered gorse, with mature pine trees down one side above the cliff to the river. In the 1950 aerial

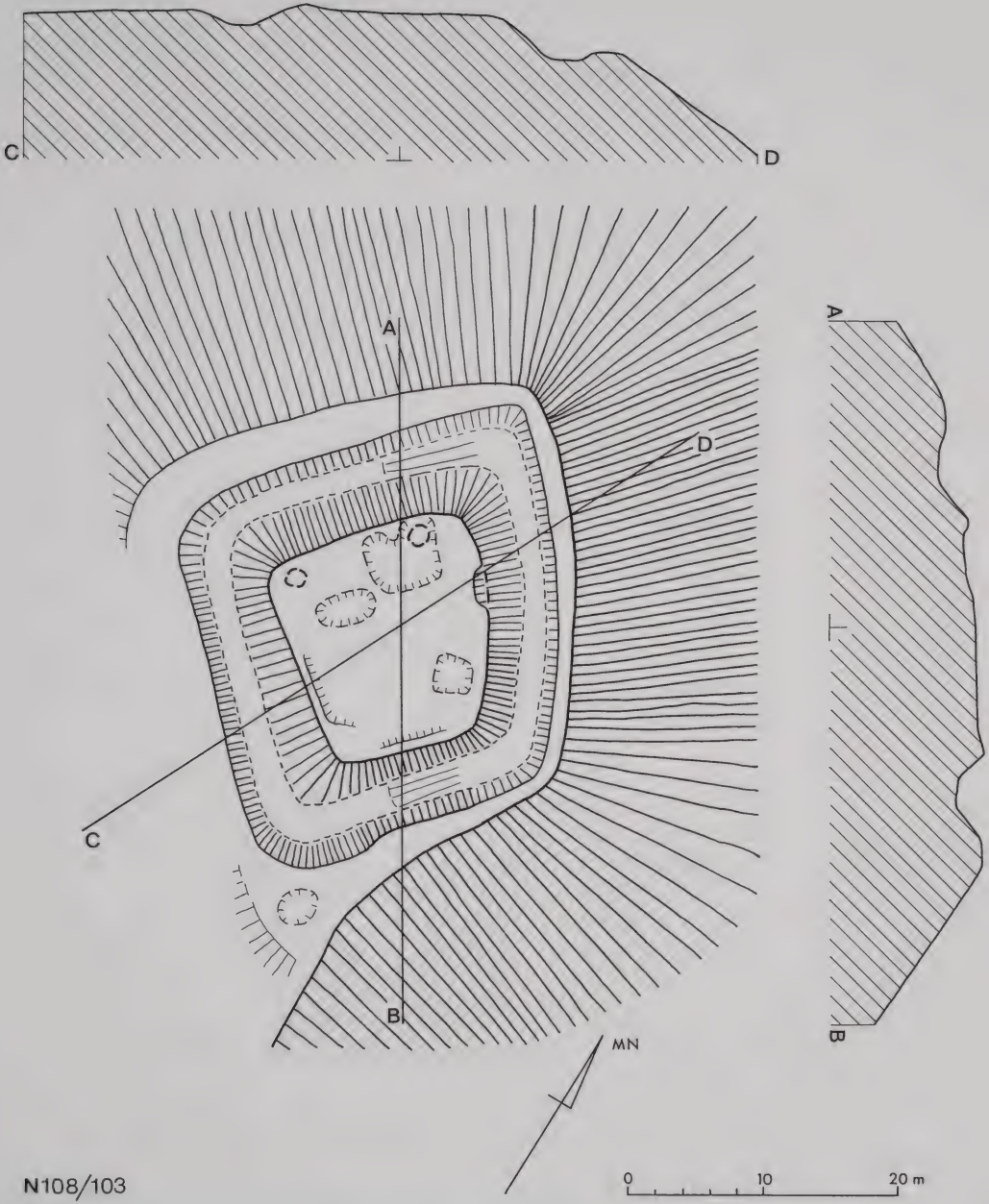


Fig. 36. Plan and sections of N108/103.

photograph (1789/2) the site is invisible under trees. The plantation was felled and removed in the late 1950s and the site itself was devastated at the time. The upper and lower transverse defences and the occupation platform have suffered greatly; only the ditch and bank defences of the east side remain in good order.

Natural defences consist of a 20 m cliff to the river on the west side and a steep 6-10 m slope into the gully to the east. At the lower, north, end of the pa artificial defences cut the spur at a low point, beyond which the spur rises slightly to continue for a further 20 m before dropping sharply to the river. At the upper end of the site the rapidly broadening spur extends on to the general level of the terrace country *ca.* 60 m outside the defences. Like so many pa of the region, N108/161 is completely dominated from the nearby terrace edge. At this end of the fortification, archaeological evidence at the cliff edge (where it has been protected by the fence and the steep face above the river) is for a single transverse ditch. Evidence at the other side of the site (above the gully) is less clear. A local informant says there were three transverse ditches at this vulnerable quarter, and, indeed, more than one would be expected. Other artificial defence consists of a single lateral ditch and bank on the east flank, and two ditches cutting the now narrow spur at the lower end. Defence on the west side was left to the cliff to the river.

The occupation platform is *ca.* 11-18 x 40 m in size, giving an area of *ca.* 600 m². It dips *ca.* 6 m from south to north, but despite this, lacks any evidence for terraces or other internal features. Whether these were present cannot now be determined.

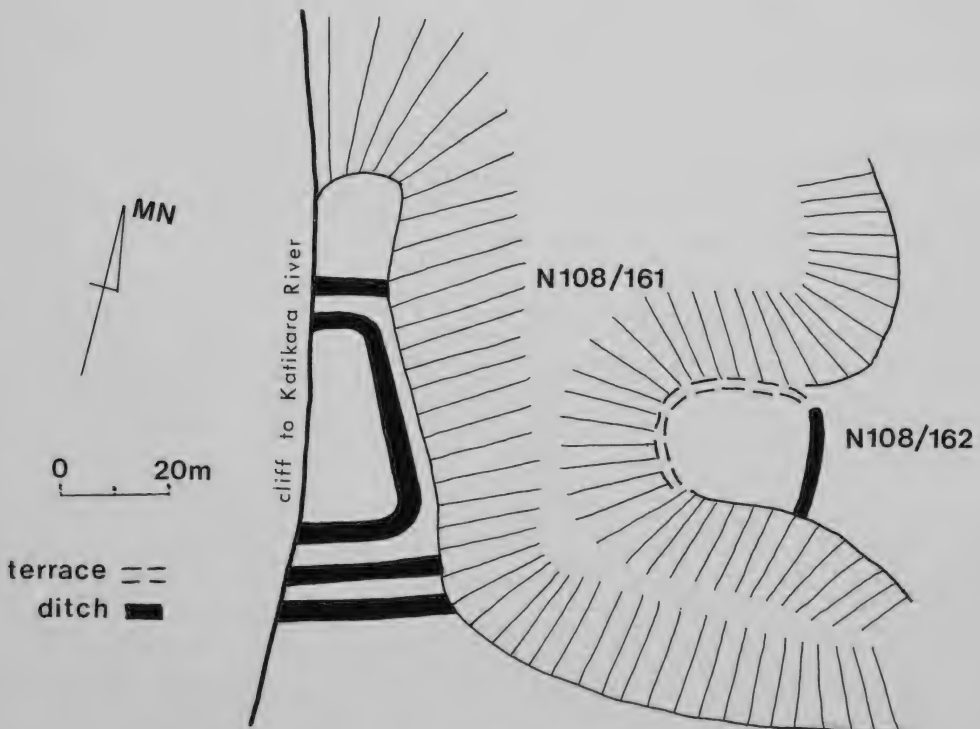


Fig. 37. Reconstruction of defences of N108/161 and N108/162.

N108/162 (475807) Fig. 37

N108/162 is situated on an abrupt little spur which drops north-west off the extensive terrace country of Lower Pitone Road. It is close to the right bank of the Katikara River, a little more than 1 km from the sea, and is immediately across the gully from N108/161. The site can be seen on the 1950 aerial photograph (1790/6). What remains is barely visible under grass.

Natural defences consist of a steep slope *ca.* 12 m into a narrow gully to the south and west, with an easier approach from the smaller gully head to the north. Access is easy from the south-east, where the relatively broad spur slopes gradually down from the nearby terrace edge, 3-4 m higher than the site and 30 m from the defences. Artificial defences consist only of a now shallow ditch 20 m long and 2-3 m wide which cuts a marginally lower part of the spur and curves slightly around the defended area at the more vulnerable north-east flank before disappearing. Approximately 5-6 m below the general level of the occupation platform is a slight terrace which runs around the front of the spur and, to an extent at least, the sides as well. This may also be interpreted as defensive.

The defended area is *ca.* 10-15 x 22 m in size, giving an area of *ca.* 250 m². The interior rises *ca.* 1 m above the defensive ditch. There is no sign now of any platforms or other features within the defended area.

The fortification does have a useful view of country across the Katikara River, but on the adjacent right bank fails to command any ground except the slightly lower approaches and interior of N108/161 over the gully to the west. From its location and its apparently minimal defences, therefore, it seems likely this site was supplementary to the more substantial work nearby.

DISCUSSION

As in the report on Maori fortifications of the Omata and Oakura districts, it is not intended here to present a full analysis of sites introduced in this paper. Some characteristics of the Tataraimaka sites, however, may be noted.

The present sample neatly parallels that of the Omata and Oakura districts in that 32 fortifications are recorded, eighteen of which have a ring-ditch form of defence. Five sites make use of a cliff on one side with the other three sides being defended by a continuous ditch. Another five pa have transverse ditch and bank defence aided by terraces and scarps where necessary. Other sites make a minimal use of defensive ditches and banks with a strong reliance on the natural defensible aspects of the site.

Ring-ditch pa commonly take the form of a single occupation platform defended by a strong ditch and bank, often with additional transverse defence at one or both ends. Seven are simple ring-ditch works without extra transverse defence. Pukewaranga (Figs. 14, 15), N108/98 (Figs. 6, 7) and N108/103 (Fig. 36), and probably Pukeporoporo (Figs. 28, 29), provide examples of this form. The majority of ring-ditch pa, however, have additional transverse ditches at one or both ends. Three destroyed, or substantially destroyed, pa appear to have had one additional ditch at one end (N108/120, Fig. 17; N108/173; N108/179, Fig. 30). N108/64 (Fig. 16) has two additional ditches at the vulnerable end, as also Puketotara may have done (Fig. 31). Sites with one additional transverse ditch at both ends are N108/166 (Fig. 23) and possibly N108/168 (Fig. 18). N108/102 (Figs. 34, 35)

and N108/170 (Fig. 22) have one additional ditch at one end and two at the other. Examples of unique forms of ring-ditch defence in Tataraimaka are the very complex Manawapo (Figs. 2, 3, 4) with its multiple defended platforms, and N108/99 (Figs. 19, 20) which is almost completely enclosed by a double ditch and bank.

Five pa occupy cliff-top situations which allow a modification to the usual ring-ditch form. At Pouteau (Figs. 33, 34), N108/106 (Fig. 26), N108/161 (Fig. 37) and N108/172 (Figs. 12, 13) a ditch and bank extends from cliff to cliff around three sides of the site. At three of the sites there is additional transverse defence at one or both ends, while at Pouteau, two transverse ditches divide the defended area into three separate platforms. N108/119 (Figs. 8, 9) is a more complex work where the curiously angled outer ditch is probably a later addition to the more usual inner defensive work. Other sites which make use of a cliff or precipitous natural slope at one or more sides are the unusual N108/165 (Fig. 25), the tiny N108/171 (Figs. 10, 11), and Patuha which relies almost entirely on its precipitous situation for defence.

Sites defended by a variety of transverse ditches with terraces and scarps along the flanks or at the down-slope end include the very large N108/60 and the three very small sites of N108/162 (Fig. 37), N108/167 (Fig. 24) and N108/177 (Fig. 32). The headland pa Tataraimaka appears to have been partly or wholly cut off from the mainland by a ditch, which was supplemented within the fortification by a series of massive defensive scarps. The sea-cliff provides sufficient security on the other sides.

Pa of the Tataraimaka district are in general larger than those of the Omata and Oakura districts. As an example, the ten smallest ring-ditch pa of the present survey area have an average occupation platform of 320 m² as opposed to 230 m² for the same group in the other districts (Prickett 1980:47). There are some very small fortifications, such as N108/171 and N108/177 which defend only 90 m² and 80 m² respectively, but more common are larger sites, of which ten (eleven if Patuha is included) defend a living space of more than 1000 m². The largest defended areas are those of Manawapo (*ca.* 6000 m²), Tataraimaka (3500 m²) and N108/60 at the Timaru River mouth (6000 m²).

Within fortifications occupation platforms sometimes have considerable evidence of internal organisation. Among the more complex living areas are Pukewaranga (Fig. 14) and N108/64 (Fig. 16), each with platforms and terraces for surface structures and three different pit forms. At Pukeporoporo *rua* are clustered together on terraces immediately outside the fortified hill-top (Fig. 28). This concentration of the storage aspect of sites, however, is uncommon: Manawapo (Fig. 2) with its many *rua* scattered throughout the site, is indicative of the more usual domestic arrangement — where surface evidence allows this to be established. Manawapo also provides the best instance of a complex site where the defended area is divided into several separately defensible platforms. Smaller examples are Pouteau (Fig. 33) and N108/119 (Fig. 8) which have three and two independently defended occupation platforms respectively.

The location and situation of pa of the Tataraimaka district vary greatly. More than half occupy elevated situations from which occupants would have a useful view over nearby gullies and terrace country. Others are situated on spurs within river and stream valleys, although even here they are generally more strongly sited than the inconspicuously situated fortifications of the districts to the north (Prickett 1980:47). The largest pa

are always strongly sited, so that the location of Koru in the Oakura River valley, while not extraordinary in the context of sites of the Oakura district, is probably unusual in the wider sample.

The distribution of large and small fortifications has some interesting features as Fig. 38 clearly shows. Works with large defended areas can be seen to lie along the coast and inland at what was the forest edge at the time of first European penetration into the district. Other large pa are located high on the Kaitake Range, while several pa of lesser size can be seen to have been sited within the valleys of the Katikara and Timaru Rivers. Within the area bounded by the large fortifications are located all of the many small works of the Tataraimaka district. This pattern of large pa at the peripheries is also apparent in the Oakura district where Koru and Kekeorangi bound an area occupied by as many as fifteen small fortifications (see Prickett 1980:3). Only in the northerly Omata district does the pattern break down. Here major coastal and forest edge sites are absent, with small works clustering in the valley of the Waireka Stream south-west of the important Te Ngahoro.

The explanation for the distribution of large and small fortifications in the Tataraimaka district must surely rest upon a complementary relation between the two. While it cannot be realistic to assume contemporaneous occupation of all pa in the district, yet it is clear that any occupants of the small works may well have had links with larger fortifications to allow a rapid congregation of population for defence if necessary. Just such a strategy was adopted in the first decades of last century when a northern *taua* was defeated by a combined Nga Mahanga force at Ngaweka, at the forest edge on the south bank of Stoney River. Smith (1910:312) writes:

“On first hearing of the approach of a hostile force, the Nga-Mahanga *hapu*, of Taranaki, all assembled to consider what steps should be taken to meet it. Some proposed that each *hapu* should remain in its own *pa* and await attack, but one of the chiefs of Nga-weka arose and said, “*Kia kotahi ano taringa hei ngaunga ma te hoa riri.*” (“Let there be only one ear for the enemy to bite”).”

In addition to their strategic relation to small fortifications the siting of large pa at the coastal and forest margins also gives those fortifications a tactical advantage in the event of siege. The tactic of abandoning fortifications which were under severe pressure is one that was adopted many times in Taranaki during the campaigns of the 1860s against the Pakeha: the location of fortifications on the coast (assuming canoes were available) and at the forest fringe may well indicate a similar motive for siting the earlier pa. Coastal pa also commanded the commonly used route through the district which lay along the beach.

The many smaller fortifications of the Tataraimaka district indicate an independent and fragmented society — this at least in normal times when external threats were absent. These works could hold little more than thirty or forty people at most if allowance is made for storage, cooking and other facilities in addition to dwellings. The few recorded undefended sites, or *kainga*, in this part of the Taranaki coast leads to the suggestion that these small pa in effect take their place in the settlement pattern, and may therefore be regarded as fortified homesteads. They were probably located close to gardens and are never more than an easy day's walk from the sea-shore and forest where food and other resources would have been available. Their frequent location low within stream or river valleys may be partly explained by their role within a network of similar works which

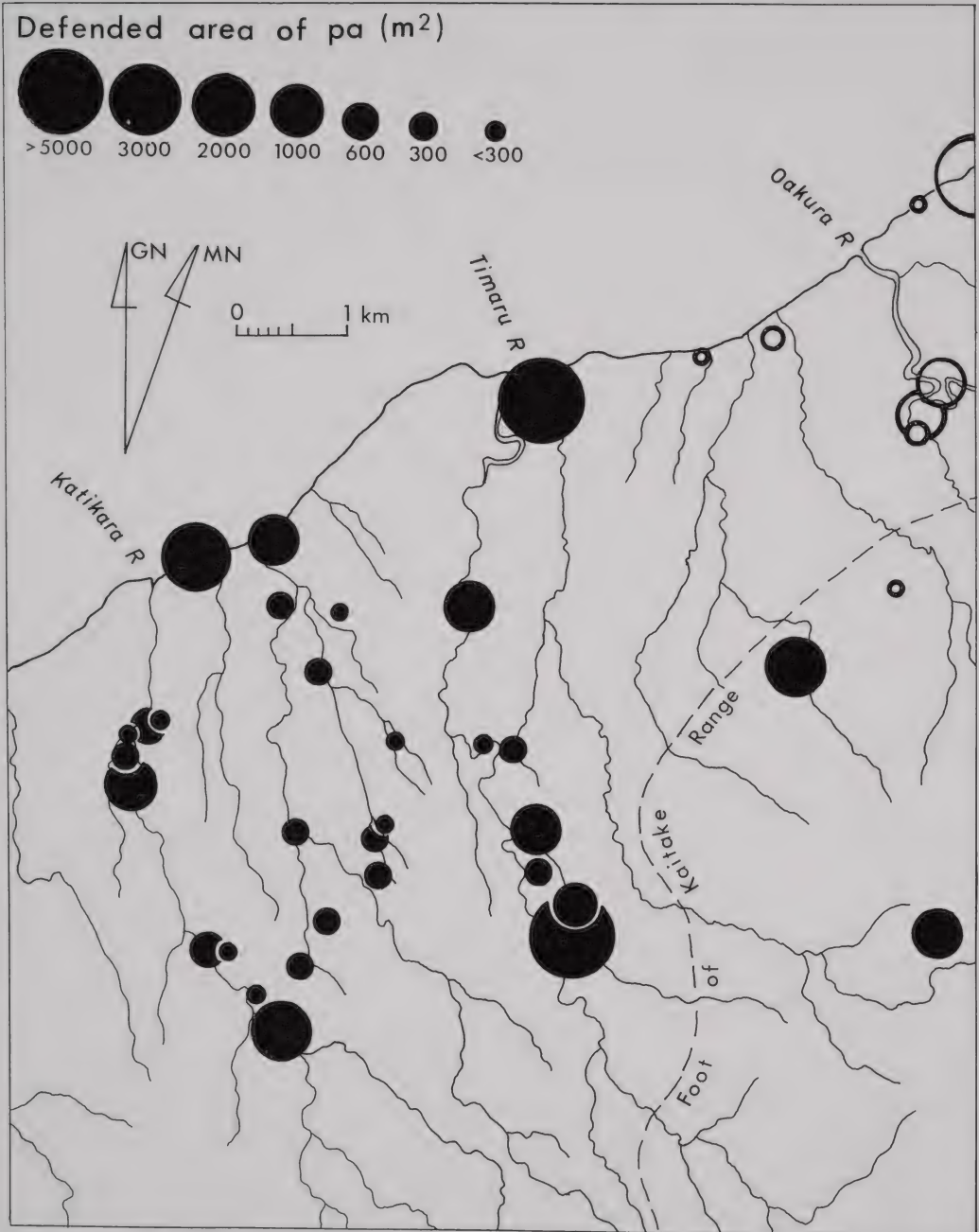


Fig. 38. Distribution and defended areas of pa in the Tataraimaka district. Open circles indicate sites recorded in the Oakura district (see Prickett 1980). Sites on the west bank of Katikara River are not shown.

might prevent any surprise or tactical disadvantage at the hands of a hostile external force. That they performed a role in feuding within the larger tribal structure also seems likely; thus they allowed both local independence for *whanau* or *hapu* groups, and the security of combination against more powerful external forces, within a network of small works and their related tribal citadels.

One other aspect of the distribution of pa as shown on Fig. 38 that bears some comment is the comparative lack of fortifications within the narrow waist of land between the rugged Kaitake Range and the sea. North and south of this area numerous works are scattered over the landscape: between the major valleys of the Oakura and Timaru Rivers, however, there are only a handful of pa on the coast or occupying elevated sites on the seaward spurs of the Kaitake Range. While unknown historical factors may be crucial in this, it might also be suggested that within this narrow strip of terrace country there was insufficient space for the network arrangement of fortifications that so clearly characterises the Tataraimaka district. Hence the only works which lie between the Oakura and Timaru Rivers are sited at the margins and possess the strategic command and tactical strengths outlined above for similarly located sites elsewhere in the survey area.

An outstanding aspect of Maori fortifications of the Tataraimaka district is their number within what is a very small area. Over twenty sites are concentrated in no more than 10 km² in the Pitone Stream and lower Katikara River area — and there are another six just outside the present survey area on the left bank of the river. Within the lower Katikara River valley eight pa are situated in an area no more than 1 km by 2-300 m. The marked similarity of many of these sites strongly suggests an historical association. Contemporaneity is sometimes indicated by complementary siting. Aspects of the distribution and similarity in form of many Tataraimaka sites point to the prospect of developing an historical model for sites of the district and the region as a whole.

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